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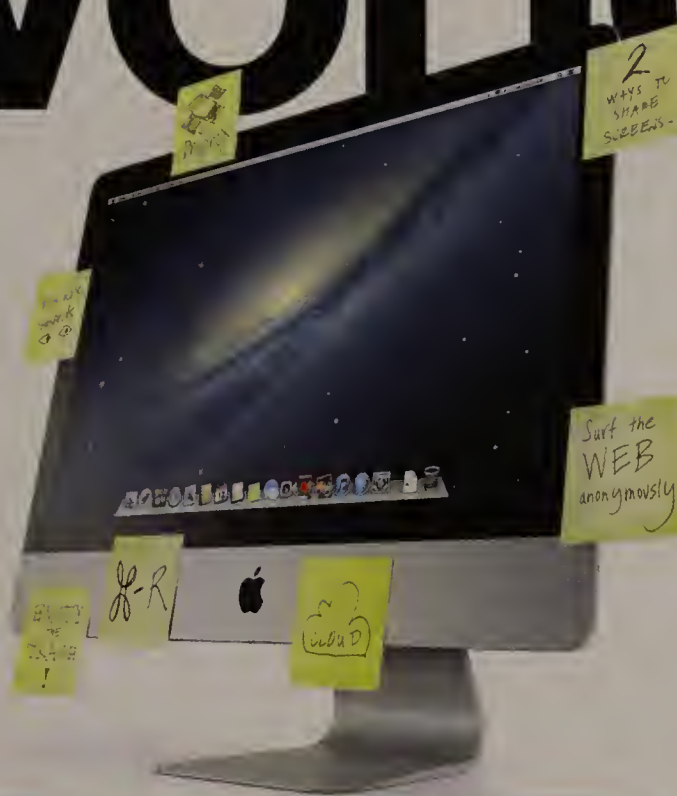


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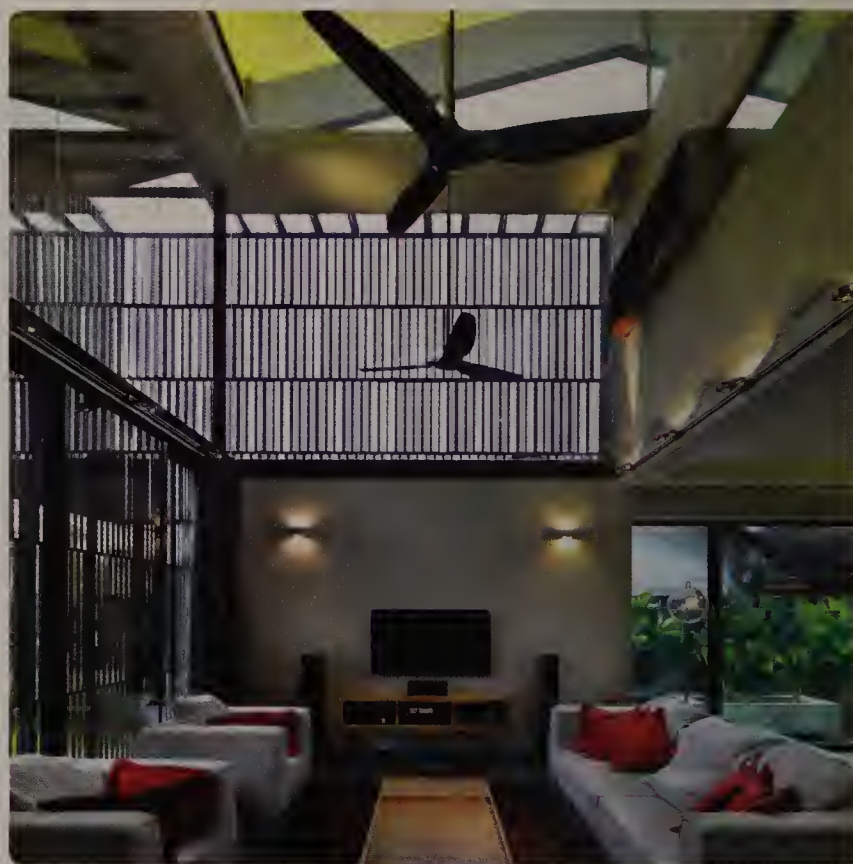
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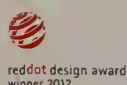


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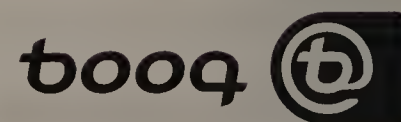
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Can Apple Ever Be Doomed Again?

The company has tons of cash as well as leadership moxie, and its failure doesn't seem likely.

Some tech pundits ask, on occasion: Is Apple doomed? The answer right now is most certainly not. In fact, the better question to ask is: Can Apple ever really be doomed again?

What Is Doomed?

First, the history: What do writers mean when they suggest Apple is doomed? In June 1997, when *Wired* magazine's cover showed the Apple logo with the tagline "Pray," there was at least a reasonable argument to be made about Apple's long-term viability: It was struggling with a messy product line, numerous ill-fated products, seemingly unstoppable competition from Microsoft, and more.

Recall that 1997 was the year Microsoft invested \$150 million in Apple's growth—money Apple seriously needed. That situation—needing a relatively small influx of cash from a serious competitor to stay afloat—does sort of have “doomed” written all over it, right?

But let's look at Apple today.

Good Fortunes

Apple today has more than \$120 billion in cash on hand. For complicated reasons—reasons which I best understand as “lowering its tax burden”—Apple holds much of that cash hoard overseas. But regardless, the fact is this: Apple has tons of money.

Now, that fact alone makes it a lot harder for Apple to earn a “doomed” label anytime soon: \$120 billion buys an awful lot of breathing room for mistakes. That is, if Apple were to grossly misstep on multiple projects, it has the financial cover to weather such problems. If research into an ill-fated iPad Maxi required \$2 billion, plus another \$1 billion advertising push, and a Doonesbury comic doomed the hypothetical



Even if Apple were to grossly misstep on multiple projects, it has the financial cover to weather such problems.

four-foot tablet to failure, then Apple would swallow hard, but survive, with “only” \$117 billion left in the bank.

That's an awfully nice position to be in. Of course, you can only rest on your incredibly massive bank account for so long. In Apple's case, that “so long” could be years: In 2012, the company said its operating expenses totaled \$10.4 billion, with research and development adding another \$3 billion. I'm no economist, but those numbers suggest to me that if Apple's cash earned no interest and the company sold absolutely no products, it could continue paying its employees' salaries and R&D costs for nine years.

Still, as nice as Apple's eye-popping savings account is, it's not the only reason that the company can't truly be classified as doomed anytime soon. The other key supporting argument is this: The fact that Tim Cook's Apple isn't

sentimental or overly proud when it's time to make key business decisions.

Kill the Weak

Cook killed Ping—well, formally, at least—when it became obvious that no one cared about Apple's lame iTunes social network; he's not the type to throw good money after bad. That Cook isn't too proud to recognize when Apple makes a mistake, and to then course-correct as needed, bodes very well for the company's future.

Remember that Cook is also the guy who aimed to shorten the life of the “iOS 6 Maps are kind of lousy” story by not merely apologizing to Apple's customers, but also by suggesting folks try offerings from competitors like Google and Microsoft instead.

If rumors prove true that Apple is working on a lower-cost iPhone to target the prepaid market (possibly a big if), it will show that Cook has also learned one of the positive lessons of Apple's history: namely, that—despite its reputation—Apple can do quite well with lower-cost products like the iPod shuffle, the Mac mini, and the iPad mini. And Apple historically is quite comfortable releasing such products, even if they eat into sales of other products in Apple's catalog.

Doomed—to Succeed

So the next time you hear a pundit claiming that Apple is doomed, that its fortunes will collapse imminently, or that some upstart competitor running a platform built by Google, Microsoft, or someone else will sentence Apple to death, remember this: The company has bucketloads of two important things—cash and leadership moxie. Armed with both, it will take a prolonged, cascading pile of defeats and mistakes for Apple to fail, and that just doesn't seem likely.

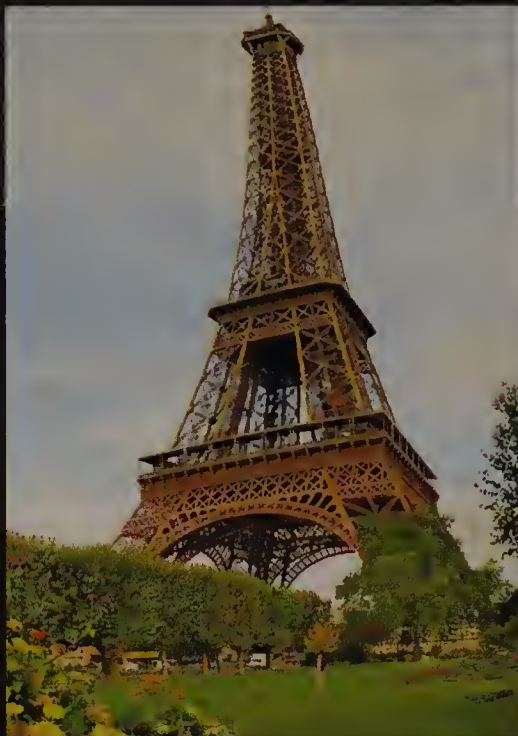
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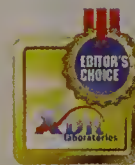
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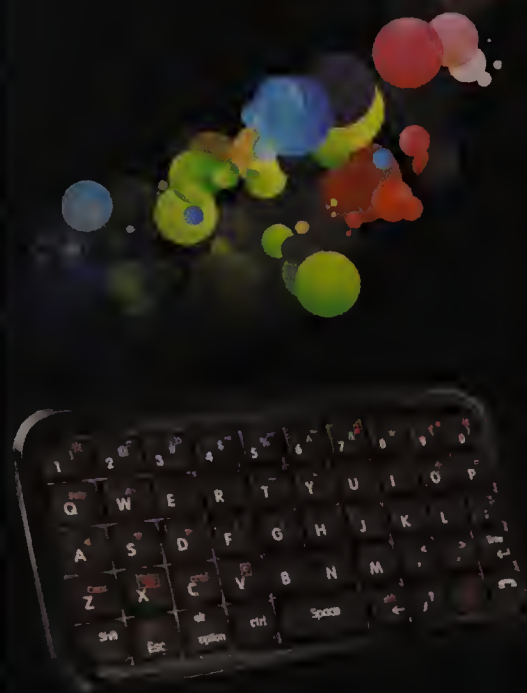
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Tips, Tricks, and Thingamabobs

It's time for more tips every Mac user should know, and although our editors have suggestions later on in the magazine, here in *Feedback* we wanted to hear from you. Readers also wrote to us about Christopher Breen's February editorial on disruption, and about Office on iOS.

APPLE'S FUTURE DISRUPTIONS

Breen has it right that we need to look to more-human human interfaces. And iPads and iPods are doing it, with Macs coming along nicely. Nevertheless, I think that the Apple folks need to be sure that they do not cripple our ability to organize stuff. File structure is not necessary if I have stuff in the tens, and use one app to access that stuff. Get much more stuff than that, or need to access it from various apps and machines, and I find that file structure helps me keep my brain organized.

—Russ Frisinger, via email

I'd like to see the scientific research that shows that touch and gestures are better than a mouse when using a computer. I remember pen-based touchscreens about 25 years ago. Everyone thought that idea was great too, until they saw the poor admitting clerks at the hospital reaching up to touch their screens for every little thing; they had to put wrist rests at the front of the monitor because their arms were so sore by day's end.

—Deac Manross, via email

DO WE NEED OFFICE FOR iOS?

Office is nowhere near as important as it was in the '90s. Having Office means nothing to most consumers. It has some

value for the corporate environment. But even there, I'm seeing workarounds such as accessing Citrix-hosted apps like Office from the iPad. It's not ideal, but it works.

—Steve_S, via Macworld.com

There are Fortune 500 companies where every person spends 40 hours a week using Office. Sales of Office are still growing, and I cannot count how many times I've had to say, "No, there really isn't a version of Office for the iPad your boss bought you. Yes, I understand that your whole job involves using Office, therefore making the iPad kind of useless." These people are stunned, because to them, that's the primary function of a computer.

—grovbergian, via Macworld.com

YOUR FAVORITE TIPS

Our readers tweet about the best ways to get the most out of a Mac.

@The_Lost_Unit: Use a trackpad over a mouse.

@OSXMonk: Set the Dock to auto-hide to have more space for applications.

@AMDeeb90: Use Time Machine!

@pacothesage: Get 1Password.

@modernmagic: Use the spacebar for quick view.

It will depend on what Microsoft leaves out of the slimmed-down versions of the Office apps. As much as I've tried to love Numbers, it just doesn't have the power of Excel.

—macFanDave, via Macworld.com

[For more about Office for iOS, see iOS Central on page 24.]

THROUGH THE LENS: APPLE FAMILY

I kept seeing the little icons of a dad, mom, children, and even pets on the back of vans, so I decided to put my Apple stickers to use. Now I have them on my car to represent my 27-inch iMac, MacBook Pro, iPads, and iPhones.

—Mike Stenberg

Have a great Apple-centric photo? Send it to letters@macworld.com, and we may feature it in a future issue.



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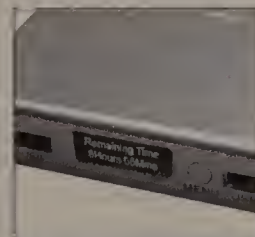
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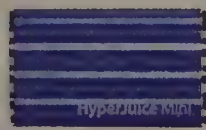
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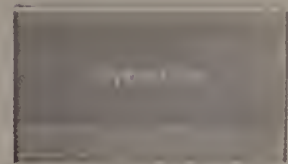
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News and Analysis About Macs, OS X, and Apple

27-Inch iMac Combines Advances, Compromises

Does the new all-in-one's 5mm edge justify the design tradeoffs?

BY JAMES GALBRAITH

Review

Apple 27-inch
iMac/2.9GHz Core i5
(Late 2012)

RATING



PRICE

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Apple 27-inch
iMac/3.2GHz Core i5
(Late 2012)

RATING



PRICE

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Apple has updated its largest all-in-one desktop computer, the 27-inch iMac, with many under-the-hood changes, but the first thing people notice is how thin it is. Does the new iMac's impressive 5mm edge justify losses in functionality?

Apple offers its new 27-inch iMacs in two standard configurations, both using Intel's

quad-core Ivy Bridge processors. The high-end \$1999 model sports a 3.2GHz Core i5 processor, while the low-end \$1799 model uses a 2.9GHz Core i5. In our tests the 3.2GHz model was between 5 and 7 percent faster than the 2.9GHz model at handling processor-intensive tasks. Both CPUs can use Turbo Boost to run at speeds of 3.6GHz for brief periods of time. For \$200 more, you can order a 3.4GHz quad-core Core i7 CPU that supports Turbo Boost up to 3.9GHz. The optional Core i7 also supports Intel's Hyper-Threading technology, which lets applications that can take advantage of multiple cores address eight virtual cores instead of the four physical ones.

All 2012 iMacs ship with 8GB of RAM, up from 4GB in the previous generation. The 27-inch iMacs ship with 7200-rpm, 1TB hard drives as standard equipment—just as the 2011 27-inch iMac did.

Both new versions of the 27-inch iMac come with four memory slots. Two slots

hold 4GB SO-DIMMs, and two are open. Apple charges \$200 to increase the RAM from 8GB to 16GB at the time of purchase, but good third-party RAM costs under \$100.

The new iMac has four USB 3.0 ports, a gigabit ethernet port, a headphone/audio-out port, and two Thunderbolt ports—but no audio-in or FireWire port. The handy SDXC card slot has moved from the side of the iMac to a less handy spot on the back, near the ports. The new model doesn't include an internal optical drive, so if you want to burn, rip, watch, listen to, or back up to CDs or DVDs, you will have to buy an external peripheral, such as Apple's \$79 USB SuperDrive.

For graphics processing, the \$1799 iMac uses the Nvidia GeForce GTX 660M with 512MB of GDDR5 memory, while the \$1999 iMac uses an Nvidia GeForce GTX 675MX with 1GB of GDDR5 memory. For an extra \$150, you can upgrade the \$1999 model to the Nvidia GeForce GTX 680MX with 2GB of GDDR5 memory.

No Reflection on You

As part of the iMac's physical redesign, Apple eliminated the 2mm air gap that used to separate the iMac's glass cover from the LCD panel. Now the glass adheres directly to the panel, reducing glare and screen reflection but also



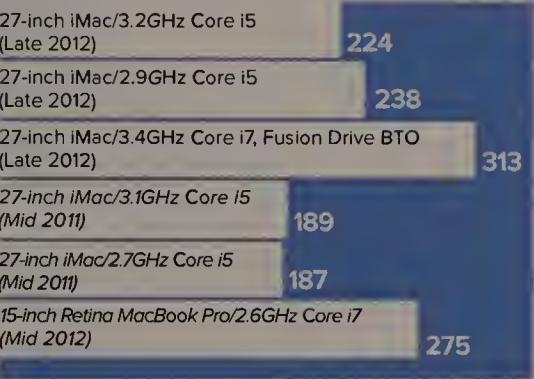
increasing the cost of replacing the front glass: If the glass breaks on this model, you have to replace the whole display. Already, in the past, only the bravest of souls dared to open an iMac; but the new design's use of adhesive instead of magnets to connect the screen to the case basically locks the iMac down to all but certified repair folk.

One positive benefit of this major design change—in tandem with a new antiglare coating process—is a very noticeable reduction in screen reflection. Apple claims to have reduced glare by 75 percent. When I stood in front of a 2011 iMac and a 2012 model, gazing at the older system was almost like staring into a mirror; but my reflection virtually disappeared when I looked at the screen of the 2012 model.

Colors on the new iMacs look vibrant and photographic images pop, with dark blacks adding the appearance of depth. The iMac's LED backlit IPS display, with a

Macworld Lab Test

Benchmarks: Speedmark 8



All results are scores. Higher scores are better. Best result in bold. Reference models in blue. Macworld Lab testing by James Galbraith, Albert Filice, and Kean Bartelman.

native resolution of 2560 by 1440 pixels, offers a wide range of good viewing angles, so you and several others can view content on the iMac screen with little loss of contrast and few color shifts as you move away from a position directly in front of the center of the screen.


























The iMacs' integrated speakers also received an upgrade, yielding noticeably

warmer and fuller-sounding music on the new system's stereo speakers. Increasing the resolution of the built-in FaceTime camera to 720p and adding a second microphone (to help eliminate background noise and improve audio quality) enhances videoconferencing.

Drive Issues

Unlike the new 21.5-inch iMac models, which switched from using the 7200-rpm hard drives that their predecessors carried to using slower 5400-rpm drives, both of our 27-inch test iMacs packed 7200-rpm drives. However, we found an unexpected difference between the hard drives used in the two 27-inch iMacs. Although not a specification quoted by Apple, one of the hard drives had twice as much on-board cache as the other and performed significantly better: The low-end \$1799 iMac came with a speedy Seagate Barracuda ST1000DM003 hard drive with 64MB of cache, whereas the

Macs: Current Lineup

PRODUCT	SPECS	RATING	PRICE	DISPLAY	SPEEDMARK 8 ¹	MORE INFO
DESKTOP						
iMac 	Intel Core i5/2.7GHz (quad-core)		\$1299	21.5 inches	194	go.macworld.com/imac212712
	Intel Core i5/2.9GHz (quad-core)		\$1499	21.5 inches	204	go.macworld.com/imac212912
	Intel Core i5/2.9GHz (quad-core)		\$1799	27 inches	238	go.macworld.com/imac272912
	Intel Core i5/3.2GHz (quad-core)		\$1999	27 inches	224	go.macworld.com/imac273212
Mac Mini 	Intel Core i5/2.5GHz (dual-core)		\$599	Not included	131	go.macworld.com/mini2512
	Intel Core i7/2.3GHz (quad-core)		\$799	Not included	164	go.macworld.com/mini2312
Mac Pro 	Intel Xeon/3.2GHz (quad-core)		\$2499	Not Included	200	go.macworld.com/macpro3212
	Intel Xeon/2.4GHz (12-core)		\$3799	Not included	215	go.macworld.com/macpro2412
PORTABLE						
MacBook Air 	Intel Core i5/1.7GHz, 64GB		\$999	11 inches	151	go.macworld.com/air641112
	Intel Core i5/1.7GHz, 128GB		\$1099	11 inches	151	go.macworld.com/air1281112
	Intel Core i5/1.8GHz, 128GB		\$1199	13 inches	166	go.macworld.com/air1281312
	Intel Core i5/1.8GHz, 256GB		\$1499	13 inches	166	go.macworld.com/air2561312
MacBook Pro 	Intel Core i5/2.5GHz (dual-core)		\$1199	13 inches	121	go.macworld.com/macbook132512
	Intel Core i7/2.9GHz (dual-core)		\$1499	13 inches	153	go.macworld.com/macbook132912
	Intel Core i7/2.3GHz (quad-core)		\$1799	15 inches	161	go.macworld.com/macbook152312
	Intel Core i7/2.6GHz (quad-core)		\$2199	15 inches	189	go.macworld.com/macbook152612
	Intel Core i5/2.5GHz (dual-core) 128GB		\$1699	13-inch Retina	184	go.macworld.com/macbookret13128
	Intel Core i5/2.5GHz (dual-core) 256GB		\$1999	13-inch Retina	184	go.macworld.com/macbookret13256
	Intel Core i7/2.3GHz (quad-core)		\$2199	15-inch Retina	257	go.macworld.com/macbookret1523
	Intel Core i7/2.6GHz (quad-core)		\$2799	15-inch Retina	275	go.macworld.com/macbookret1526

¹Speedmark 8 is Macworld Lab's standard test tool for benchmarking systems running Mac OS X 10.8 (Mountain Lion). For more information, see go.macworld.com/speedmark8.

Upgrade Your Mac's Optical Drive Options

BY OWC LARRY | blog.macsales.com



Macs are constantly evolving. They're becoming faster, more powerful and as found in the MacBook Pro with Retina display and the new iMac, they're becoming significantly thinner.

While saving space and looking great, this evolution also has drawbacks. With ultra-thin designs, something must fall by the wayside. And in the new iMac, rMBP, MacBook Air and Mac mini, one important part is left out — an optical drive.

New, thinner Macs aren't the only machines that suffer from a lack of an optical drive. In older Macs, the drive can simply wear out over time. Naturally, Other World Computing makes it easy to replace a failed drive or add one as an external!

With OWC's range of internal and external optical drive upgrade/replacement solutions, you can burn CDs, DVDs and BD-R discs. You can even make your own Blu-ray movies with Roxio Toast. Check out all your options at www.macsales.com/superdrive.

Optical drives make it easy and affordable to back up files for long-term storage, rip audio CDs instead of re-buying digitally, send files without network access, or send pictures of videos to family members who don't often use computers. You can also install disc-based apps and keep playing your games that require you to have the disc in the drive.

If you decide you no longer need your internal optical drive, you can install our Data Doubler kit in certain Macs and repurpose the optical drive's space for a second hard drive or SSD. And, you can use our SuperSlim enclosure to use your optical drive as an external. Check out our article in January's issue of Macworld or visit www.macsales.com/dd to see how!



high-end iMac had a slower Western Digital WD10EALX Caviar Blue drive with 32MB of cache. The Seagate-equipped 2.9GHz iMac took 96 seconds to copy and move a 6GB file on the drive; the WD-bearing 3.2GHz iMac took 146 seconds. Since Apple doesn't specify hard-drive brands or offer detailed drive specifications beyond capacity and rotational speed, you can't predict which drive will arrive in your iMac. When we bought a customized 27-inch iMac with a 3.4GHz Core i7, it shipped with the faster Seagate drive installed as part of its Fusion Drive. Owing to its faster drive (presumably), our low-end iMac outperformed our high-end system on 9 of the 15 tests that make up Speedmark 8, and the 2.9GHz iMac's overall Speedmark 8 score was 6 percent higher than the 3.2GHz iMac's score.

Configure-to-order storage options include a 3TB hard drive (for an additional \$150), a 1TB Fusion Drive (\$250), a 3TB Fusion Drive (\$400), and 768GB of flash storage (a whopping \$1300 premium). Fusion Drive is an Apple innovation that marries a roomy 1TB or 3TB standard hard drive with 100GB of zippy flash storage.

Easy Access Unlike its 21.5-inch brethren, the 27-inch iMac has user-accessible RAM slots, so users can add more memory.

The Fusion Drive looks and acts like a single drive to the end user; but in everyday use, it performs like an SSD.

Bottom Line

The new 27-inch iMacs are strikingly designed, but the loss of internal optical drives and built-in FireWire ports dampens my enthusiasm for the makeover. The new iMac's drastically reduced glare and generous 8GB of RAM will benefit every user. Enhanced FaceTime cameras, better-sounding speakers, and faster processors sweeten the deal, and the optional Fusion Drive's ability to offer an SSD's speed with a hard drive's capacity represents a breakthrough in storage. With only subtle differences in CPU and graphics performance between the high- and low-end 27-inch iMac models, your best bet might be to purchase the \$1799 iMac and then put the \$200 that you'll save by making that choice toward the optional 1TB Fusion Drive.

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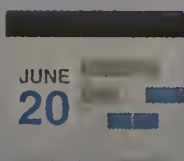
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How Apple Sets Its Prices

BY MARCO TABINI

Both iOS devices and Macs seem to be impervious to the discount game. In fact it's so rare to find a significant price variance between retailers that such events usually attract press coverage.

House Advantage

To pull off this unusual feat, Apple uses a strategy called *price maintenance*. Most products move from manufacturers to retailers through a network of distributors. Each product has a "manufacturer suggested retail price" (MSRP), but each retailer is free to set its own sale price. Thus, a laptop with an MSRP of \$500 might cost the retailer \$250 to buy, and might carry a sticker price of \$350, with a "30% Off!" announced discount.

The price variability is possible because of the difference (often from 30 to 55 percent) between the wholesale price that the retailer pays and the MSRP for each unit. That gap leaves enough room for each retailer to set its own policies and generate a sometimes significant range of market prices for a product.

Apple, however, gives retailers only a tiny wholesale discount on its Macs and iPads—probably only a few percentage points off the official price that you find at Apple's own stores. With such a narrow gap to tinker with, most retailers can't offer big discounts and still hope to turn a profit.



Minor Markdowns Apple's price maintenance strategy makes undercutting its MSRPs difficult.

The price maintenance approach cuts both ways: Retailers have relatively little incentive to carry Apple products, or to

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dedicate precious retail and advertising space to them, if the potential profit from sales is so low. On the other hand, large chains often turn a barely profitable product into a "loss leader," selling it below cost to increase customer traffic or to boost sales of ancillary goods that have a higher profit margin.

To deal with this tactic, Apple supplements its tiny wholesale discounts to resellers with more substantial monetary incentives that are available only if the resellers advertise its products at or above a certain price, called the "minimum advertised price" (MAP). This arrangement enables retailers to make more money per sale, but it prevents them from offering customers significant discounts, resulting in the nearly homogeneous Apple pricing we're used to seeing.

The strategy helps Apple make more money on direct sales, and avoid having to compete against marked-down prices offered by its own resellers. Since Apple's

own retail operations are among the most profitable in the world, undercutting their prices for the sake of a wider distribution network would be counterproductive.

Most important, limited price variability prevents any one retailer from establishing a strong enough market position to give it an advantage in future negotiations with Apple. Big-box store chains like Walmart are notorious for using their heft to extract higher discounts from manufacturers.

Carrier Complications

The situation with the iPhone is slightly different. Though the phone's retail price is in the hundreds of dollars, most consumers buy it alongside a two- or (in Canada) three-year cellular service plan. In exchange for the opportunity to charge their iPhone customers \$70 or more a month, the carriers subsidize the cost of the device itself, which consequently carries a much lower price than it would if sold unlocked and contract-free.

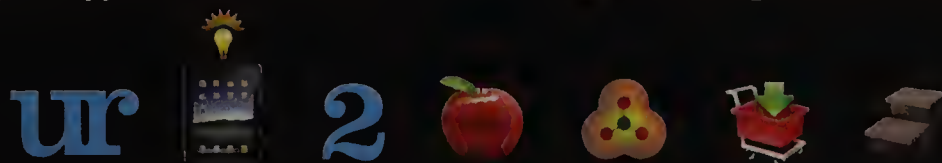
For retailers, these phone-and-service-contract deals are profitable not because of the hardware's selling price, but because of a commission that carriers pay them, depending on the length and the cost of the mobile plan each customer chooses. Many stores will sell you an iPhone at the discounted price only if you buy it with "in-store activation"; otherwise, they'd miss out on the bulk of their financial gain from the transaction.

The cumulative effect of Apple's pricing policies on consumers is hard to nail down. On one hand, we're deprived of the positive effects that price competition normally produces in a free market. On the other hand, Apple's generous profit margins and tight control over its distribution channels have enabled the company to produce higher-quality goods at prices that only modestly exceed those of rival products. Thus, arguably, consumers enjoy a better overall experience, dollar for dollar, in the long term.

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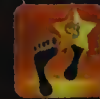
Games

\$ave,Depo\$it,Inve\$t



Education

TrackIn' It Up



Health & Fitness

Matrox DS1 Thunderbolt Docking Station

BY KEAN BARTELMAN

Review

RATING



PRICE

\$249

COMPANY

Matrox

URL

matrox.com

Apple's MacBook Air is thin, light, and great for traveling—but when you get to your desk, the ritual of plugging in a keyboard, an external monitor, speakers, and an external hard drive can feel anything but

convenient. For ethernet users, the absence of an ethernet port in the MacBook Air (and the Retina MacBook Pro) can pose a problem if you don't have Apple's Thunderbolt Display or Thunderbolt to Gigabit Ethernet Adapter.

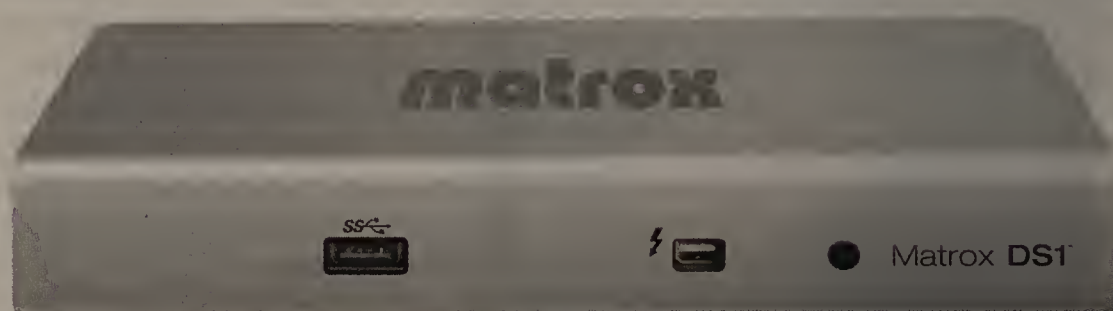
The DS1 from Matrox can help. This \$249 docking station has a single Thunderbolt connector, and when you link it to your Mac with a Thunderbolt cable, the DS1 provides connectivity for audio, gigabit ethernet, USB 3.0 (one port), and USB 2.0 (two ports). It does not have FireWire ports.

Matrox sells two different models of the DS1: one configured with DVI video output, and one with HDMI video output. If you have a DVI or HDMI display, you can connect it to the DS1, instead of using a Mini DisplayPort adapter and connecting it to your Mac's Thunderbolt port.

Convenient Connecting

The DS1 creates what Matrox describes as “one-cable convenience,” eliminating the need to connect and disconnect individual devices as you come and go from your desk. Simply unplug the Thunderbolt cable and power adapter from your laptop, and you're free to take your MacBook with you wherever you need to go, without having to unplug any other cables.

If you have a Mac with one Thunderbolt port (such as the MacBook Air), you'll find one major drawback to the DS1: It too has just one Thunderbolt port, through which it connects to your Mac. When you're using the DS1, you can't connect a single-port external Thunderbolt drive and the DS1 at the same time. However, if you have a



One-Stop Docking Matrox's DS1 offers multiple connectivity options via one cable connector.

device with two Thunderbolt ports (such as LaCie's Little Big Disk, which we tested with the DS1), you can connect the DS1 to that device, and then connect that device to your Mac. Since the DS1 has only one Thunderbolt port, it must be at the end of a Thunderbolt daisy chain.

In our lab, we connected the DS1 to a number of different peripherals. First, we updated our MacBook Air to OS X 10.8.2, since the DS1 won't function properly with any operating system version prior to that one. After completing the OS update, we connected a LaCie Little Big Disk Thunderbolt SSD to our MacBook Air, and hooked the DS1 to the LaCie drive. We also connected a DVI display to the DS1 and used it in a mirrored setup (you may also configure the display to extend your desktop). We then added a USB keyboard and a mouse, attaching them to the two USB 2.0 ports on the back of the DS1. Finally, we connected a gigabit ethernet cable and headphones to the back, and attached a USB 3.0 external drive to the front. Everything worked as expected.

Bottom Line

Offering a nice complement of connectivity options, the DS1 docking station lets you turn your Thunderbolt MacBook into a full-fledged desktop workstation without buying Apple's \$999 Thunderbolt Display. But its lack of a second Thunderbolt port for attaching peripherals is regrettable, especially for owners of MacBook Air laptops.

Three Ways to Control Your Cables

Creative cable organizers can help you organize your wires, cords, and cables, before you end up with an actual fire.



Cable IDs

These flexible, helix-shaped cable labels (\$8, The Container Store)

wrap around cables and accept ballpoint pen or marker labeling.



Sumo Cable Box

The paperweight-like Sumo cable

box (\$2, BlueLounge) has two grooves for cables to run through, and micro-suction pads so that the box won't slip off of your desk. It comes in black and white versions.

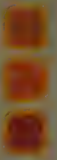


Your Magnet

Available in red, scarlet, choco-

late, gray, and lime green, this suction cup magnet (\$7, Lufdesign) attaches to mobile devices and keeps multiple cables organized. It's useful if, say, you have several USB devices plugged into a laptop.

Blackmagic design



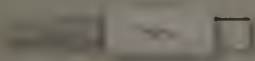
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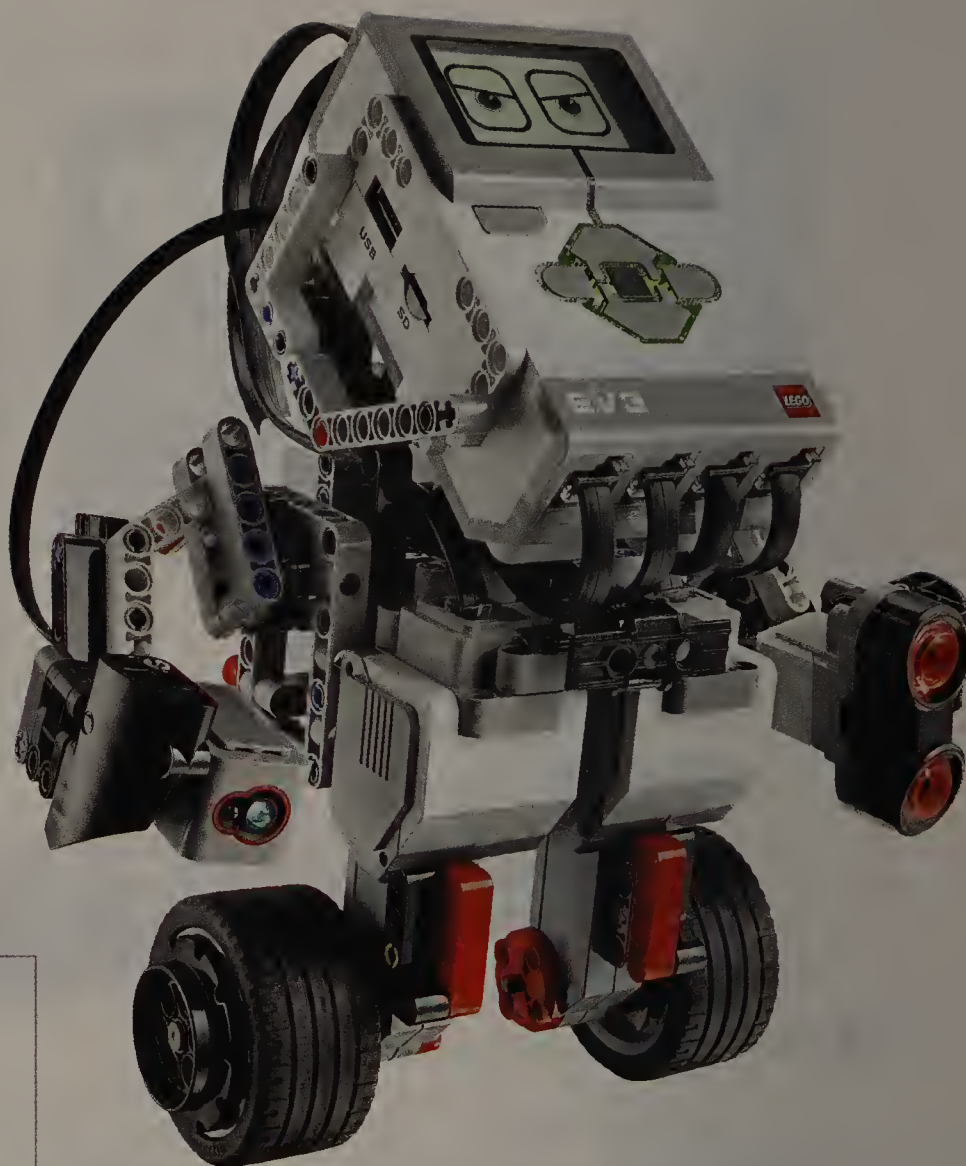
Learn more today at www.blackmagicdesign.com/intensityshuttle

Hot Stuff

What We're Raving About This Month

Lego Mindstorms EV3

Like previous Lego Mindstorms kits, the EV3 has as its keystone a programmable brick that serves as the brains of your creations. The EV3 Intelligent Brick includes such new features as an infrared sensor, Bluetooth, Linux-based firmware, a USB port, and an SD Card slot. The programming software kit works on the Mac, and you can use your iPhone to control your Mindstorms EV3 creations remotely. Also new in this latest Mindstorms kit are 3D building instructions that you'll be able to view on your tablet. If you want a Mindstorms EV3 kit, you'll have to wait a little bit: It won't come out until the second half of this year, and it will cost \$349 (www.legoeducation.us).—NICK MEDIATI



Napkin

This \$40 app lets you mark up images or create new ones. It supports sharing and lets you add screens or photos from a Mac's built-in camera. Napkin offers intuitive controls and help options (aged-and-distilled.com).—LEX FRIEDMAN

Universal Dual Band WiFi Range Extender, Wall-plug Edition (WN3500RP)

Netgear's compact device plugs into a wall outlet and promises to extend coverage of 2.4GHz and 5GHz Wi-Fi networks simultaneously. Compatible with any Wi-Fi router, the \$100 device ships with a docking station (www.netgear.com).—YARDENA ARAR



DataTraveler HyperX Predator 3.0 1TB

Kingston's new 1TB USB flash drive is rated for read speeds of up to 240 megabytes per second and write speeds of up to 160 MBps. With a USB 2.0 connection, it can achieve speeds of up to 30 MBps. The company hasn't announced the price for the 1TB model yet, but judging by the tag on its half-capacity sibling, it won't be inexpensive. A comparable 512GB Kingston model costs a whopping \$1750, which works out to \$3.42 per gigabyte, compared to \$1.17 per gigabyte for an average 128GB drive (www.kingston.com).—DANIEL IONESCU




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Mac Gems

Discover Great, Low-Cost Mac Products **Edited by Dan Frakes**

UTILITY

Trickster 2.1.1

★★★★; \$10; Apparent Software; apparentsoft.com

If you find Apple's various recent-item menus useful, but wish they were smarter, you're the target audience for Trickster, a menu-bar utility that's more flexible and capable than OS X's options.

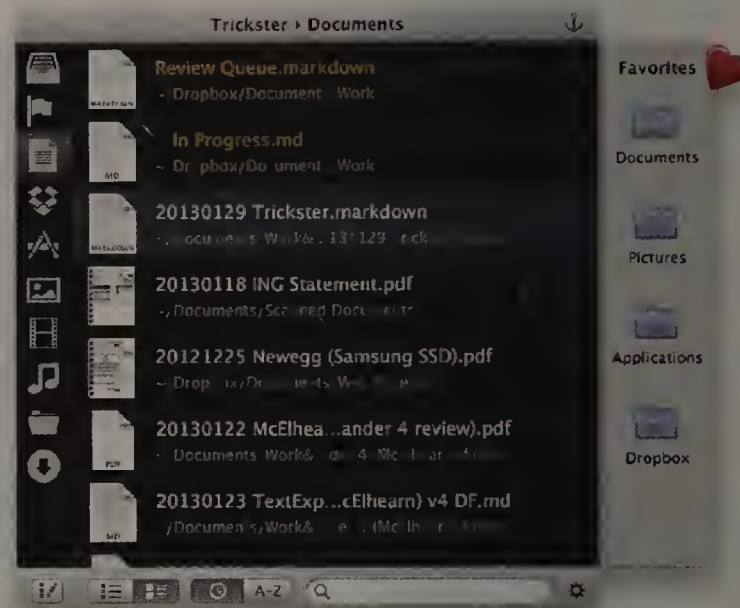
When running, Trickster monitors your Mac, watching for any document, folder, or app that you open or that is modified. Click Trickster's systemwide menu-bar icon, and a window opens that by default lists all of those recent items; the color of each item's name in the list reflects any labels you've applied to it. Double-click an item to open it, or drag it out of the Trickster window to work with it as if you were dragging its icon in the Finder.

You can sort the list alphabetically or by date/time (most-recently accessed at the top), and you can choose between

Compact view, which shows each item's name and icon, and Expanded view, which displays a larger preview icon for each item along with as much of the item's file path as will fit given your chosen window width.

Trickster keeps items in the list for the duration you specify in its preferences. You can also opt to display only items you specifically open, omitting items modified or created by background processes or other means.

Trickster's filters, which are listed on the left-hand side of the Trickster window, are especially useful. Filters are sort of a cross between OS X's Recent menus and



the Finder's Smart Folders, with easier access to both. The utility provides several stock filters, and you can create new filters to display particular sets of items; Trickster lets you choose from roughly 50 icons to make your custom filters easier to find in the list.—DAN FRAKES

PRODUCTIVITY

Vimari 1.6

★★★★½; free; Guy Halford-Thompson; guyht.github.com/vimari

I'm a keyboard person, but there's no fast, easy way to use a keyboard to navigate websites, open links, and the like. OS X has some special accessibility features that let you use the keyboard for these tasks, but those features were designed with accessibility, not productivity, in mind.

So I was happy to discover Vimari, an extension for Safari (based on the nifty Vimium extension for Chrome) that lets you open links and more via the keyboard.

After installing the Vimari extension in Safari, press Vimari's Link Hint shortcut (by default, <Control>-F) to place a two-letter keyboard shortcut, highlighted in yellow, over every link on the current webpage.



Shortcuts for links in particular areas of the screen tend to start with the same

letter (for example, D for links in the nav bar at the top of the page shown at left, and K for links in the middle of the page).

To open a link, press its two letters in succession. Thus, for FJ, press F and then J. Safari will respond by opening the link in the current tab or a new one, depending on the link's code.

To force links to open in a new tab, add <Shift> to your Vimari shortcut. So, by default, you'd press <Shift>-<Control>-F.

Vimari also offers limited navigation shortcuts, including scrolling shortcuts so your hands stay in the main keyboard area.

For keyboard jockeys, Vimari increases Safari's appeal and usability.—DAN FRAKES

PRODUCTIVITY

TextExpander 4.05

★★★★; \$35 (\$15 for owners of older versions); Smile; smilessoftware.com

Version 4 of Smile's text-expansion utility has added some notable new features.

TextExpander lets you create abbreviations for *snippets*—bits of text that you frequently type. Whenever you type an abbreviation in any document or text field, TextExpander instantly replaces the abbreviation with the corresponding snippet. I've created snippets for my name (*kmc*), address (*ad1*), and telephone numbers (*ttel* and *tmob*), as well as more-complex snippets for writing in HTML that take advantage of special TextExpander features. For example, my *hrf* snippet types an ``-tagged link and then inserts the contents of the clipboard as the URL.

The program can also automate filling out online forms, inserting email signatures, and even correcting typos (instantly replacing *teh* with *the*, for example).

TextExpander's systemwide menu provides quick access to all of your snippet abbreviations. Choose one from the menu to paste it immediately.

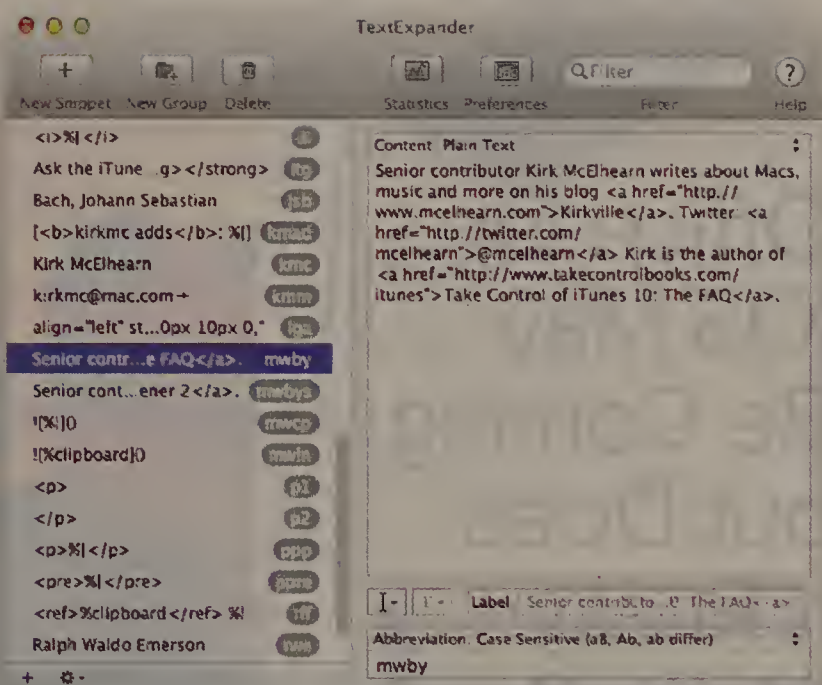
Smile provides a number of useful snippet libraries, but it's easy to create

your own snippets, too. Commands to 'Create Snippet From Clipboard' and 'Create Snippet From Selection' bring up a small pop-up window for quickly creating new snippets from the clipboard or from text that you've selected in the frontmost app, respectively.

The new TextExpander also has a convenient Edit

Last Expanded Snippet option: If you want to change a snippet after expanding it, choose this menu item to edit the snippet in a pop-up window.

The most significant new features in TextExpander 4 are additional options for using *fill-ins*, which are complex snippets offering fields that you can fill in on the fly, or which can contain multiple choices.



For example, you can create a form-letter snippet that prompts you to fill in fields with the recipient's name, as well as specific information that varies from letter to letter. You even have the option of using pop-up menus to choose from a list of values.

If you're a fan of TextExpander—and especially if you use fill-ins—version 4 is a nice improvement for \$15.—KIRK McELHEARN

EDUCATION

KidsMotion 1.0.5

★★★★; \$25; Aquafadas; aquafadas.com

It's tough to beat old-fashioned arts and crafts, but these days kids sometimes want to set aside old-fashioned tools and explore their creativity using the family Mac. The results are often amazing and satisfying—and much easier to clean up.

Aquafadas's KidsMotion is an OS X app designed to help kids create high-quality slideshows from photos, videos, and music with minimal effort. KidsMotion takes many cues from its more-advanced cousin, PulpMotion, but its simpler interface should minimize the frustration that might otherwise attend the challenge of building a complex slideshow.

The app comes with a selection of 50 templates designed specifically for a young audience, with themes that range from sports to cartoons, from holiday cheer to artistic landscapes. Cute animations accompany the transitions between slides and photos. Users can swap templates in and out at any time, making the process fun and stress-free—which is not a bad feature for adults, too.

The editing interface lets you position, crop, and rotate images; you add those images by dragging them onto the KidsMotion window from the Finder or your iPhoto library. You add videos similarly.



KidsMotion lets you add music from your iTunes library or from any location on your hard drive. The app automatically plays the music alongside the slideshow, fading it in and out as appropriate.

You can export your slideshows in a variety of formats suitable for different devices, or you can upload them directly to Facebook or YouTube.—MARCO TABINI

iOS Central

The Latest on the iPhone, iPod Touch, iPad, and App Store

Office for iOS May Be Coming, but Does It Really Matter?

Microsoft's productivity suite has lost relevance in the mobile era.

BY JOHN MOLTZ



Let's turn back the clock to Macworld Expo Boston, 1997. Not literally: It wouldn't really serve any purpose, and it would definitely take too long. Particularly if it's an analog clock.

But go back and watch the now-infamous Steve Jobs keynote from that Expo—you can find it on YouTube (go.macworld.com/jobskeynote)—and any number of ironies will jump out at you. For starters, you'll see Steve Jobs talk about how great it was that Apple and Microsoft had just committed to cross-licensing their patents. Why was this great, according to the man who would, a little

over ten years later, pledge to wage “thermonuclear war” against Android? “Relationships that are destructive don't help anybody in this industry,” Jobs said. “I'm extremely proud of these companies, that they have resolved these differences in a very, very professional way.”

Through cross-licensing.
Uh-huh.

In fairness to Jobs (actually, in undue fairness to Jobs), a lot of the things he said carried expiration dates of his own determining. And it's also possible that he thought destroying Android would foster a more productive relationship with Google. (Hey, I said I was being unduly fair.)

Jobs also made two other big Microsoft-related announcements. One revealed Microsoft's investment of \$150 million in Apple, which received cheers—but only after Jobs noted that it would be nonvoting stock. The bigger deal for Mac users, however, was the news that Microsoft had committed to shipping Office for the Mac for five more years.

Microsoft, as the movie *Pirates of Silicon Valley* will tell you, helped save Apple by committing to Office on the Mac platform. In 1997, Office for Mac was that important to Apple. As a Mac user in 1997, I remember this distinctly. A lack of Office would have killed the Mac.

But that was then.

Tablet Manners

Let's fast-forward to the present. No, no, don't rush to your clocks or your DVD players—it's just a figure of speech,

In the past 15 years, Microsoft Office has gone from being a must-have product to being largely irrelevant in today's biggest product category: mobile computing.

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people. Rumor has it that Microsoft is pushing Apple to lower its 30 percent cut of App Store proceeds in order to make Office for iOS a reality. If that's true, I can't imagine that Apple is exactly rushing to satisfy Microsoft's demands.

By most accounts, Apple still has more than half of the tablet market locked up. Most of the remaining market share belongs to Android or Android derivatives, and Office isn't available on that platform, either. Yet people keep buying tablets.

Microsoft still sells copies of Office hand over fist; but until the release of the Surface, the productivity suite was almost completely absent from the mobile market, which continues to increase in popularity every day. (The suite is found only on legacy Windows-based tablets, which don't even register on the sales charts.) It's not as if the Surface has been a barn-burner in this regard, either. (Microsoft has yet to release figures on how many barns the Surface has burned down.)

A good text editor—such as BBEdit, or any of the dozens of excellent Dropbox and iCloud-based iOS editors—is now my writing tool of choice.

In the past 15 years, Microsoft Office has gone from being a must-have product to being largely irrelevant in today's biggest product category in technology: mobile computing. Some people believe that, by shipping Office for iOS, Microsoft could have furthered the impression that the suite is essential, but I think the shift in users' habits is more fundamental.

Office Politics

A word-processing application was necessary back in the era when printing was a daily activity. Heck, we'd print all kinds of ridiculous things in the '90s: résumés, term papers, holiday letters, dungeon-master character sheets ... uh, I mean, *résumés*.

Ahem.

But eventually I, like many others, simply stopped needing to print. Everything I wrote I transmitted electronically or published on a webpage. And

really, good riddance to printing. Printing is horrible. Printers are horrible. Printing software is what people in Dante's ninth circle of Hell are condemned to use over and over. A plague on you if you ask me to print something these days; a pox on you and your house if you ask me to fax something. A good text editor—such as BBEdit, or any of the dozens of excellent Dropbox and iCloud-based iOS editors—is now my writing tool of choice. Memorize a few pieces of Markdown syntax and kiss your old word processor good-bye.

Having banished the word processor, we're left with the Tito and Jermaine of traditional office suites: the spreadsheet and the presentation application. Personally, I use a spreadsheet only when I'm running low on money. I still need one, because I frequently run low on money, but, for \$20, Numbers (📊📊📊; go.macworld.com/numbers) still offers more than I need. As for presentation software, do I look like I enjoy public

speaking? Not with a chin like mine.

It's not that Apple's iWork is beloved. But since it costs just \$60 for all three applications—compared to \$125 for a home and student license of Office—Mac users can put up with it. Apple clearly doesn't place a huge amount of importance on its productivity suite: The last major revision to the bundle was iWork '09—as in the year 2009. My handy \$20 spreadsheet program informs me that that's four years ago. After updating the software fairly frequently early in its life, Apple has left the programs to languish. And I don't blame the company a bit.

I'm not claiming that office applications are going to die out—that would be a ridiculous argument to make. I do find them to be anachronistic, however. Mobile platforms and the Web have taught us the flip side of that old saw: If you hate something, let it go. If it doesn't come back, good riddance.



Straight Talk, Walmart Offer Unlimited iPhone Plan

If the words *unlimited*, *iPhone*, and *no contract* are a few of your favorite things, then Straight Talk Wireless is ready to make your day. The carrier is offering the iPhone 4 and iPhone 5 on its \$45-per-month unlimited plan.

For that \$45, you get unlimited voice, texting, and data—but with some trade-offs. You'll be buying the iPhone unlocked, which means unsubsidized. Also your choice of models is limited: The iPhone 5 is available only in 16GB—in white or black—for \$649, while the 8GB iPhone 4, also in white or black, costs \$449 (sorry, no iPhone 4S). Straight Talk is also offering an unlimited plan with unlimited international calling for \$60 a month.

Additionally, the plan is available only through Walmart. However, the retail giant wants to sell you an iPhone today—so much so that it's offering no-interest financing on the cost of the iPhone, which works out to a \$25 fixed monthly payment. One caveat: you must use a Walmart credit card to purchase the phone in a store.

You can also buy an unlocked phone directly from Apple. And T-Mobile will also be ending subsidies and offering no-contract plans in the next few months—right around the time it also begins selling the iPhone (see page 28).—DAN MOREN

Marvel's Comics Subscription Service Comes to the iPad

The Web-based service works fairly well, but has its flaws.

BY JASON SNELL

Comic book publishers, including Marvel Comics, have found success in selling à la carte digital issues, via ComiXology's Comix mobile app and Marvel's own app. But Marvel's first foray into selling comics digitally was its Digital Comics Unlimited subscription service, with its catalog of over 10,000 comics. Ever since the service launched in 2007, it has required Adobe Flash—an unfortunate choice given that mobile devices, notably Flash-averse tablets such as the iPad, are ideal for reading digital comics. But Marvel has been beta-testing (among paying subscribers

only, it seems) an HTML-based viewer for use on non-Flash devices. I've read several issues on my iPad and have found it does a decent job, but with some weak spots.

The service lets you read unlimited issues, but the library lacks current issues of Marvel series. It's like the Netflix Instant version of Marvel Comics—for \$10 a month or \$60 a year, you can graze freely from both classic and somewhat recent events.

Finding Comics

The selection in the Unlimited library is spotty. I found more than 300 issues of the 500-plus-issue run of *Uncanny X-Men*,

including the very first issues and the Byrne-Claremont run; but I didn't find my beloved Paul Smith issues, or most of the recent issues. You can search the catalog by character, series, event, or release date,

Even though using Marvel's Web interface to find comics works, it's stunningly inefficient—a native app would work much better.

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so I was able to select 'House of M' and see all the books in that event, not just the core eight-issue miniseries.

The service's Web interface leaves a lot to be desired. Reading forward through a series requires re-sorting, since by default issues are displayed from newest to oldest. And even though using Marvel's Web interface to find comics works, it's stunningly inefficient—a native app would work much better. Even if Marvel kept using its new Web-based engine just for reading issues, finding issues would be easier with an app that displayed the catalog more efficiently.

Reading Comics

Zooming and panning in a Safari window isn't great; I discovered that the best way to read comics was on a full-size iPad—on an iPhone or iPad mini, things were too small. You can use a slider or forward and back arrows to move through an issue, but I found it easier to swipe left and



Browser Be Gone
Safari's browser chrome unfortunately stays visible at all times, which shrinks the comics page into a smaller space.

right, though I was occasionally unable to swipe to the next page, and sometimes the page-turn arrows appeared and refused to go away. More troubling, some issues just didn't load. I'll chalk these quirks up as being bugs to be fixed by the time the beta-test period is over.

The biggest problem I found with Marvel's Web-based reader, however, was that Safari's browser chrome remains visible the entire time, forcing the comics pages into a smaller space. Again, Marvel could solve this problem by building an app wrapper around its Web viewer.



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T-Mobile to Carry iPhone, but Without Subsidies

Carrier may undercut competitors, offer unlimited data plans.

BY JOEL MATHIS

Yes, the iPhone is officially coming to T-Mobile in the United States. But the device will probably be much pricier—at least up front—than it is at competing wireless carriers.

John Legere, CEO of T-Mobile's parent company, Deutsche Telekom AG, told Reuters in January that the U.S. wireless carrier would begin carrying the iPhone "in three or four months." However, the phone will arrive at the same time that the company eliminates subsidies for smartphones, meaning that the basic 16GB iPhone 5—which costs \$200 from AT&T, Sprint, and Verizon—might sell for the full \$649 cost that Apple charges for unlocked and contract-free phones.

The upside? Normally, those companies get the subsidies paid back during the life of the two-year contract that they require customers to sign when buying the phones. If T-Mobile doesn't have to subsidize the phone, Legere suggested to Reuters, T-Mobile can offer cheaper and more flexible smartphone service plans than its rivals. Some customers might decide it's worth paying more initially in exchange for cheaper rates or shorter service contracts.

Competitive Edge

Another point that differentiates T-Mobile from other iPhone carriers (aside from Sprint) is that it offers unlimited data plans. Given that T-Mobile is entering the iPhone market five years after that smartphone debuted, the carrier could gain ground by

providing a very different customer experience than most other carriers.

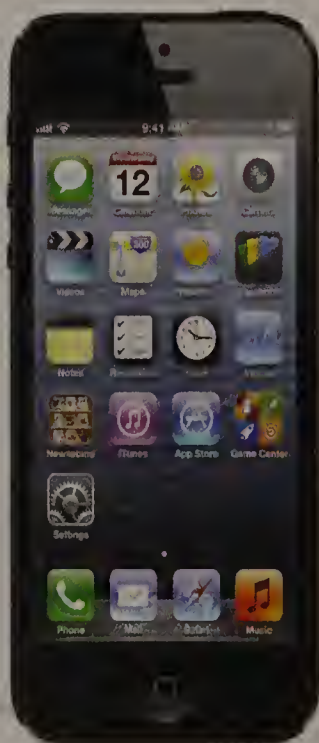
Laying the Groundwork

This isn't the first news from the Apple and T-Mobile camps. In December, the carrier announced that it had teamed up with Apple to bring products to market in 2013, with additional details to be made available at a later date.

In September, the company announced that it was "turning up" its HSPA+ networking service in the 1900MHz spectrum in the Las Vegas, New York, Seattle, and Washington, D.C., metro markets, with more areas scheduled to be upgraded over time. That move seemed aimed at improving T-Mobile's appeal to iPhone customers, as the new network will finally be able to offer iPhone owners data speeds comparable to those that AT&T and Verizon offer. Though T-Mobile uses the same GSM standard as AT&T, it previously relied on a radio frequency that the iPhone doesn't support, limiting users of the handset to the much slower speeds of the EDGE network.

T-Mobile has not addressed how the iPad and iPad mini might factor into all of this. The iPad and iPad mini both boast LTE connectivity with AT&T, Sprint, and Verizon; T-Mobile likely wants a piece of that pie as well. The carrier plans to roll out its LTE network this year, and it should use the same Band 4 spectrum as AT&T. That could open the door for the iPad and iPad mini to come to T-Mobile.

T-Mobile's entry into the iPhone market means that soon all major U.S. carriers will offer Apple's smartphone.



What's New at the App Store



Old Maps Anew

In this Google Maps era, you wouldn't think that an old-fashioned offering like the \$2 National Geographic World Atlas for iPhone and iPad (go.macworld.com/ngworldatlas) would retain its appeal. But the app relays its information with beauty and precision. The redesigned version 3.0 offers updated country and weather data across the globe.—JOEL MATHIS



The Fantasy Continues

Hard to believe, but the Final Fantasy franchise—which debuted in 1991—is now old enough to drink. Somehow, it's never actually the "Final" Fantasy, though. Final Fantasy IV (go.macworld.com/finalfantasy) is, well, finally available on iOS, as a \$16 game for both iPhone and iPad. This version includes new 3D graphics, as well as Game Center support.—JOEL MATHIS



Snazzy Travel Snaps

If you take the trips plotted out in the National Geographic app, the free Travelgram app (go.macworld.com/travelgram) allows you to apply Instagram-style filters to your vacation photos, while also captioning them with their location as well as the time they were taken. You can share pics to Facebook, Twitter, and other services.—JOEL MATHIS



Custom Sports News

In its seeming quest to attract your eyeballs no matter which screen you're looking at, ESPN is offering the free ESPN SportsCenter Feed app for the iPhone and iPad (go.macworld.com/espnsc), a customized news service that delivers headlines and videos for your favorite sports and teams—minus the coverage you don't want.—JOEL MATHIS

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App Guide

Software for Your iPhone, iPod Touch, and iPad

Jumpin' Jackabee PlayPhone

GAMES When I want a gaming app to while away idle hours, I look for games that are immersive and challenging, but that require a low commitment, such as Angry Birds and World of Goo. Now, Jumpin' Jackabee PlayPhone joins that group. Jumpin' Jackabee is a beautifully designed, addictive action puzzler that captures the spirit of the 1980s Q-bert arcade game. You are Jackabee, a cute, rabbitlike creature, and your goal is to hop along a floating block structure, gobble up apples, power-ups, and other goodies, find hidden stars, and hop down a hole that leads you to the next level—all while avoiding an increasingly serious series of baddies. The game has 18 worlds to unlock, each more challenging than the next. You can enter the first 14 each time you complete the previous level, but the stars you snag along the way are the key to unlocking the last four worlds; if you fail to collect each level's stars, you will need to go back and find them if you want to complete the game without resorting to an in-app purchase. While I love Jumpin' Jackabee, I was disappointed to find that my game progress wasn't synced between iOS devices. Other than that, it's a nearly perfect—but perfectly addictive—game.—JEFFERY BATTERSBY


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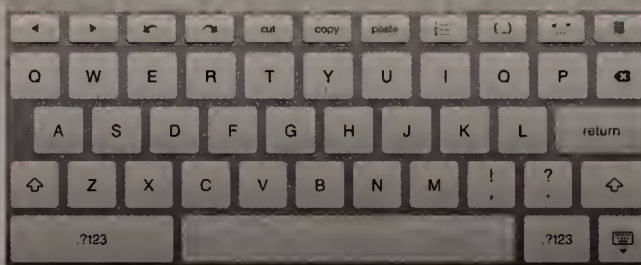
Lets you create a new "file"—which is a document—or a new folder to contain many files. Once open, a simple blank page. Keyboard is similar to the one you usually see on iPad, but with an extra row across the top for numbers. A keyboard icon offers quick access to other commands. (This is only on the iPad; the iPhone version of the app offers only the basic iOS onscreen keyboard.)

Autosave

Pin security

Can access docs in other device? Yes, link through Dropbox. Can turn on auto sync, once you do your document on one device will appear where you left off on the other.

Can use writemate to link to another iOS device, use that device as a keyboard.



iPad. You can email a document, save it to Dropbox as a text file, print it, or save it as a PDF. Where Write 2 HD sets itself apart is with two features: One lets you secure your notes and files with a PIN code; the other enables you to pair Write 2 HD with Daniel V.W.'s WriteMate, an app that lets you use one iOS device as the external keyboard for another—so you could use your iPhone to write notes on your iPad screen. Nevertheless, while Write 2 HD is solid and functional, app buyers might be able to duplicate many of this app's features—and even add a couple—for a lower price.—JOEL MATHIS

iPhone/iPad | ; \$3; Daniel V.W.

Write 2 HD

PRODUCTIVITY Write 2 HD is a basic note-taking and text-creation app for the iPhone and iPad. If you link the app to your Dropbox account, you can use Write 2 HD on multiple devices. So you can start a document on your iPhone, say, and continue writing on your



Kumo Lumo

GAMES Chillingo's Kumo Lumo is a free, charming game for the iPhone and iPad. You play Lumo, a smiling storm cloud with a deep, rumble voice. Your job is to circle the planet and rain on things to make them grow. Trees become

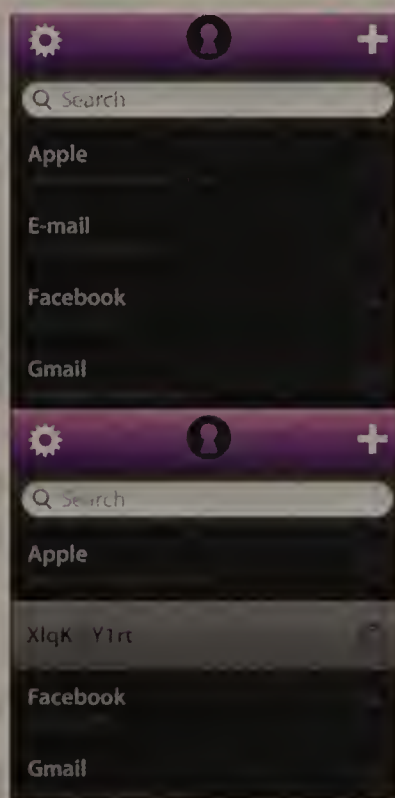
forests, hills become mountains, and small towns become cities thanks to Lumo's rain. Lumo is also responsible for disposing of nature-destroying enemies, such as flamethrower-carrying foxes, black smoggy clouds, and volcanoes. To navigate around the globe, you can either spin the planet or tap and drag Lumo around the screen. Lumo can hold only a limited amount of rain, so it's important that you fly around and collect water from other sources. The game currently includes 36 levels, each of which has one goal and three possible stars to be earned. Overall, Kumo Lumo is an adorable game, although its movement could be a little more precise, especially when you're running low on water. Getting extra stars can be frustrating, too. But there's no push to get you to spend money, though you can certainly pick up some extra gold pieces to buy upgrades through in-app purchases. If you're a casual gamer, Kumo Lumo is a great game for the price.—SARAH JACOBSSON PUREWAL

iPhone/iPad | ; free; Chillingo

PassLocker

SECURITY PassLocker offers a simple interface for managing your logins and passwords. The app focuses solely on storing your credentials and helping you retrieve them fast. Unlike other password managers, PassLocker does not embed a Web browser that you can use to inject the various bits of information onto HTML forms. Instead, you copy a username from your password locker to the pasteboard by tapping a small icon on the app's main screen. This action causes the display to switch to the corresponding password, which you copy and paste the same way. Unfortunately, this repeated copy-and-paste process can be time-consuming on an iOS device. Even worse, it exposes each password in clearly visible text. On the upside, the app supports iCloud, so your data syncs across all your devices running iOS and OS X. And at \$2, it's a reasonable choice if you can live with its limitations.—MARCO TABINI

iPhone/iPad | ; \$2; InnovationBox



Photoset 1.0

PHOTOGRAPHY Photoset is microblogging site Tumblr's app for sharing a group of photos—which Tumblr calls a *photoset*—from your mobile phone. You don't need a Tumblr account; instead the app uploads your photos to a website, Photoset.com, and gives you a shortened link for sharing them. To create a photoset, you can capture new pictures or use those already in your photo gallery. Either way, you must take or select the photos one by one, which is cumbersome for large photosets. Once you've selected the pictures, you can move the photos around to adjust the layout; unfortunately, you can organize the images only horizontally, not vertically. After designing your layout, you can click *Upload* to send the photoset to Photoset.com, or you can continue to add things like captions and location information. Once you upload, you receive a shortened link that you can send to your friends, or buttons to share the photoset via email, Twitter, and Tumblr. I'd like to see more options, including the ability to share to Facebook directly from the app (though you can do so from the website).—ED OSWALD

iPhone/iPad | ; free; Tumblr

Reviews

Accessories and Add-Ons for Your iOS Devices



Hardware

PureGear Kickstand Case and Holster

★★★★; \$30; PureGear; www.pure-gear.com

If you watch a lot of video or use FaceTime often, this

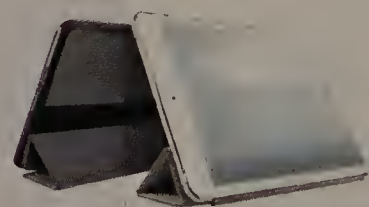
lightweight iPhone case/stand/holster combo could come in handy. The rubberized case's kickstand lets you prop up your iPhone in landscape or portrait orientation for easy viewing. Or you can close the kickstand and slip the case into a separate holster that clips onto a belt or bag. Removing the phone from the case can take some prying, so the case is best for long-term storage. But it feels protective despite being so light.—LEAH YAMSHON



SuperTooth Crystal

★★★★; \$70; SuperTooth; www.supertooth.net

For people who conduct a huge volume of calls in their car, a Bluetooth speakerphone is the way to go. The well-priced SuperTooth Crystal is one such model that you slide into a small metal clip you keep attached to your sun visor. The dainty unit is easy to pop on and off. The controls can be tough to use by feel alone, but they deliver solid feedback when tapped. In my tests, voices sounded reasonably clear in the car, but callers could tell I was on speakerphone. Still, the Crystal did a good job of shoving car noise into the background. Regrettably, the company does not offer a complementary smart-phone app.—AOIFE M. McEVoy



SwitchEasy CoverBuddy

★★★★½; \$20; SwitchEasy; www.switcheasy.com

The CoverBuddy is a slim rubber hardshell case that protects the back of your Smart Cover-clad iPad mini, in matching colors. At a svelte 1.5mm thick, the cover snaps easily onto the back of the iPad mini, and provides cutouts for the Lightning port, the rear camera, the side

switch, the top microphone, and the headphone jack. The CoverBuddy uses press-through button overlays that cover the volume and sleep/wake controls, and both work quite well. The case also ships with plug covers for the headphone jack and Lightning port. The CoverBuddy covers everything the Smart Cover doesn't, making it an excellent companion.—LEX FRIEDMAN








XtremeMac InCharge X5

★★★★½; \$150; XtremeMac; www.xtrememac.com

If your family owns multiple iOS devices, you no doubt have myriad cables and chargers strewn about. The InCharge X5 dock helps tame the clutter by letting you fast-charge up to five iPads, iPhones, and iPods in any combination. The X5 features five 30-pin dock-connector cradles, and though Apple's latest devices use the newer Lightning connector instead, I bet most households and businesses still have enough of the older devices to make the X5 appealing. And the X5 works with newer devices as long as you use Apple's adapters. I did, however, have a hard time properly seating the second- and third-generation iPad and the iPod touch, as well as devices in their cases.—DAN FRANKS

iOS Devices: Current Lineup

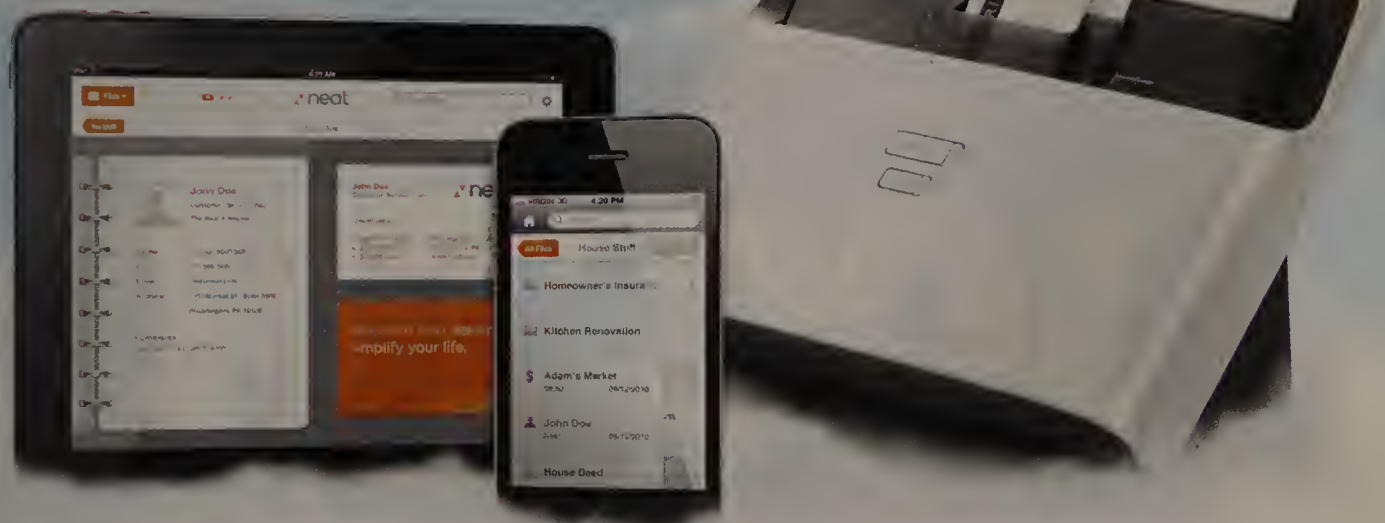
PRODUCT	SPECS	RATING	PRICE ¹	DISPLAY	MORE INFO
 iPad 2 ²	16GB	Wi-Fi, ★★★★★	Wi-Fi: \$499; Wi-Fi and cellular: \$629	9.7-inch color (Retina)	go.macworld.com/ipad4
	32GB	Wi-Fi, ★★★★★	Wi-Fi: \$599; Wi-Fi and cellular: \$729	9.7-inch color (Retina)	go.macworld.com/ipad4
	64GB	Wi-Fi, ★★★★★	Wi-Fi: \$699; Wi-Fi and cellular: \$829	9.7-inch color (Retina)	go.macworld.com/ipad4
	16GB (iPad 2)	★★★★★	Wi-Fi: \$399; Wi-Fi and cellular: \$529	9.7-inch color	go.macworld.com/ipad2
 iPad mini	16GB	Wi-Fi, ★★★★★	Wi-Fi: \$329; Wi-Fi and cellular: \$459	7.9-inch color	go.macworld.com/ipadmini
	32GB	Wi-Fi, ★★★★★	Wi-Fi: \$429; Wi-Fi and cellular: \$559	7.9-inch color	go.macworld.com/ipadmini
	64GB	Wi-Fi, ★★★★★	Wi-Fi: \$529; Wi-Fi and cellular: \$659	7.9-inch color	go.macworld.com/ipadmini
 iPhone 4, 4S, and 5	8GB 4 ³	★★★★★	Free	3.5-inch color (Retina)	go.macworld.com/iphone4
	16GB 4S ⁴	★★★★★	\$99	3.5-inch color (Retina)	go.macworld.com/iphone4S
	16GB 5 ⁴	★★★★½	\$199	4-inch color (Retina)	go.macworld.com/iphone5
	32GB 5 ⁴	★★★★½	\$299	4-inch color (Retina)	go.macworld.com/iphone5
	64GB 5 ⁴	★★★★½	\$399	4-inch color (Retina)	go.macworld.com/iphone5
 iPod Touch 4th Generation	16GB	n/a	\$199	3.5-inch color (Retina)	go.macworld.com/touch4
	32GB	★★★★½	\$249	3.5-inch color (Retina)	go.macworld.com/touch4
 iPod Touch 5th Generation	32GB	★★★★½	\$299	4-inch color (Retina)	go.macworld.com/touch5
	64GB	★★★★½	\$399	4-inch color (Retina)	go.macworld.com/touch5

n/a = Not available. ¹All prices are Apple's prices. ²Separate Wi-Fi-and-cellular iPad models are available for AT&T's network and for Verizon's. ³This phone is available only with an AT&T plan. ⁴These models are available with an AT&T, Sprint, or Verizon plan.

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ALIAS

install
app...

Check the
Wi-Fi menu!

Arrange by
Com-Ctrl-5:
Date Modified

Toggle
Hidden
Files

Eliminate
Suspects



6 ways
to Reclaim
Disk Space

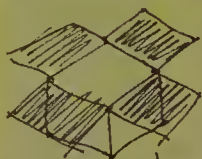
Create
an
alias

can out
our
DOWNLOADS
fold

SIGN UP
FOR A
FREE

AIM
account!

customize
UR
PMI
DOM



Dropbox

ll Date
Files

2
WAYS TO
SHARE
SCREENS...

Lock file:
Enable "locked"
Option

-5-
ways to
take a
screenshot



SWITCH TO
A DIFFERENT
BROWSER

MORE
100 THINGS
EVERY MAC USER
SHOULD KNOW

ESSENTIAL KNOWLEDGE FOR ANYONE WHO WANTS TO BE

Click "More Info"
to learn more
about a file.

Install the
latest version
of JAVA

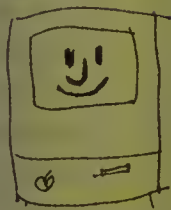
Google

CREATE A
MOTION CAPTURE
OF YOUR
MAC'S SCREEN

Arrange by:
Com - Ctrl - G:
Size

Use a cloud
based email

Surf the
WEB
anonymously



Open
terminal

range b
Com - Ctrl -
Date Add.e.

H-R

DONT FORGET:
CREATE
SUBFOLDER

Move to a
hidden
folder

Arrange by:
Com - Ctrl -
2: Kind

T

wo years ago, in our April 2011 issue, we ran an article called "100 Things Every Mac User Should Know." The idea was to compile a bunch of tidbits—keyboard shortcuts, Finder

techniques, and the like—that we thought every savvy Mac user should understand and feel confident when using. Not ABC beginner stuff, and not truly esoteric expert-level maneuvers, but the kinds of things that mark you as experienced and informed.

Of course, there are a lot more than 100 such things. So we decided to revisit the idea, coming up with another hundred pieces of Mac-related information we think users should have at their command. So, yes, you now have 200 things you need to know.

As we said back in 2011: We're sure you know a lot of the things we've listed here. But we bet that very, very few of you, if you're really being honest, can say you know them all.

PHOTOGRAPH BY PETER BELANGER | ILLUSTRATIONS BY ANDREW BANNECKER

Finder

9 Things You Can Do With a Finder Info Window

Click an icon in the Finder, and press **⌘-I**, and you'll be presented with the associated item's Info window. There you can perform a number of useful chores, including the following nine.

1 Change the file's icon

Copy an image into your Mac's Clipboard, select the icon in the Info window's top-left corner, and choose **Edit → Paste**.

2 Add keywords to Spotlight Comments

Enter keywords in the Spotlight Comments area such as **Awesome**, **Business**, and **Yum**; afterward, you can use these keywords to search for files with Spotlight.

3 Create stationery pads

Turn the file into a stationery pad. These elements behave much like templates: When you open a file that you've

designated as a stationery pad, you'll be working with a copy of the document, rather than with the original. To turn a file into a stationery pad, enable the *Stationery Pad* option.

4 Lock a file

To make a file uneditable, enable the *Locked* option in the General area of the Info window.

5 Learn more about the file

Click the *More Info* triangle for details about the file—a lot or a little, depending on the kind of file. Choose an image file, for example, and this section will list its dimensions and (if available) some of the image's EXIF data (camera model, focal length, f-stop, and exposure time).

6 Rename the file

In the Name & Extension area, you can rename

your file, and you can choose to show or hide its extension.

7 Open the file with a different application

Occasionally you may want to open HTML files with a text editor instead of using a browser. Go to the Open With area, and select the app you want to use to open that file; if you want to use that app for all files of the same type, click *Change All*.

8 Preview your file

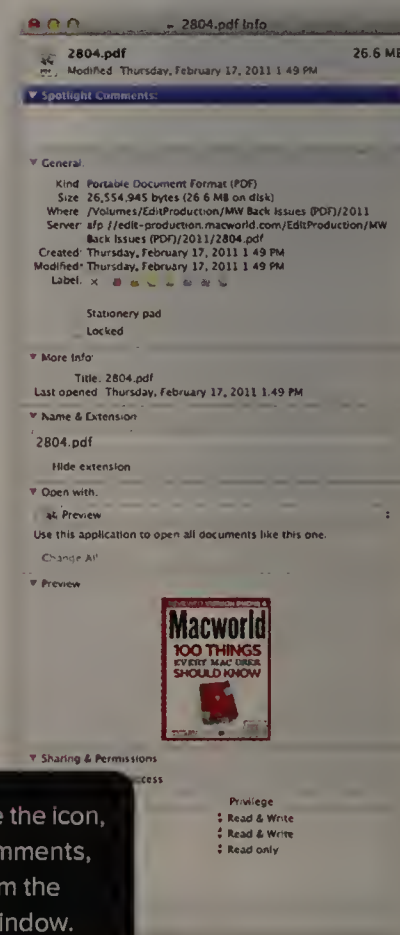
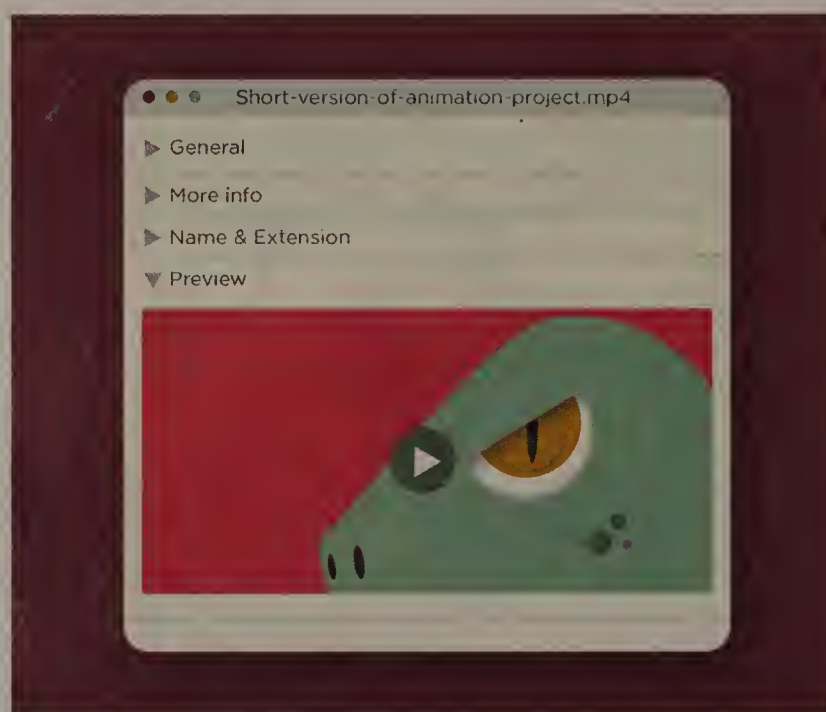
In the Preview area of the Info window, you can play music and video files, and see thumbnail images of graphics and text files.

9 Change permissions

At the bottom of the Info window, you'll find the Sharing & Permissions

area, where you can specify the privileges a user must have in order to access and edit a file or the contents of a folder. To alter the permissions settings, click the lock icon, enter your username and password, and then click in the Privilege column to change an access setting—from 'Read & Write' to 'Read only', for example. To add other user accounts or groups, click the plus (+) button, choose a user or group, and then click *Select*.

If you've chosen to change a folder's permissions, you can apply the revised permissions to the items within the folder by choosing *Apply to enclosed Items* from the Tools menu.—CHRISTOPHER BREEN



1-9. Manage the icon, Spotlight Comments, and more from the Finder Info window.

2 Ways to Change Your Account's Short Username

For whatever reason—maybe you were in a rush when you first set up your Mac, maybe your name has changed—you may someday want to change your short username. (That's the one that gives a name to your home folder in the Finder—the no-spaces name that you use in various places in OS X, not the longer username found in the Users & Groups pane of System Preferences.) Here are two effective ways to change the shorter username.

10 Use an alias

This method will work if you want to be able to enter a shorter name in name/password dialog box fields or when logging in to your account. So if your name is Englebert Rumplestiltskin, and the OS X Setup Assistant kindly made your short username 'englebertrumplestiltskin', you can create an account alias of 'rumple'; thenceforth, whenever you would normally type 'englebertrumplestiltskin', you can type 'rumple' instead.

Open the *Users & Groups* pane of System Preferences from any administrator account. If the lock icon in the lower-left of the window is locked, click it and provide an administrator username and password. In the list of accounts on the left, right-click or <Control>-click the name of the account that you want to modify, and then choose *Advanced Options*. In

the Advanced Options screen, click the plus (+) button under Aliases and then type your desired account alias. (Don't make any other changes.) Click *OK*, and restart your Mac.

11 Change your actual short username

If an alias isn't enough—if, for example, you want to change the name of your home folder and your short username—you can change the actual name. A couple of caveats: First, some apps and services store settings based on your short username or on the path to your home directory (*/Users/username*); if you change that username, those apps or services may get confused.

Second, because OS X's Time Machine tracks files based on paths, if you change the name of your home folder, Time Machine may conclude that it needs to back up everything again. That said, here's how to proceed with the alteration.

Disable *Automatic Login* (in the Users & Groups pane of System Preferences) for the account you're modifying, if it's currently enabled. Log out of the account that you want to modify, and then log in as a different user who has administrative access. (If you don't have an extra administrator account, you can create one in the Users & Groups pane.)

Open the *Users & Groups* pane. If the lock icon in the lower-left of the window is locked, click it and provide an administrator username and a password. In the list of accounts on the left, right-click or <Control>-click the name of the account you want to modify; then select *Advanced Options* from the resulting menu. In the Advanced

Options screen, delete the account's current short username in the Account Name field, and type in the new one. Change */Users/oldusername* in the Home Directory field to */Users/newusername*. Make note of the original and new paths, and then click *OK* and close System Preferences.

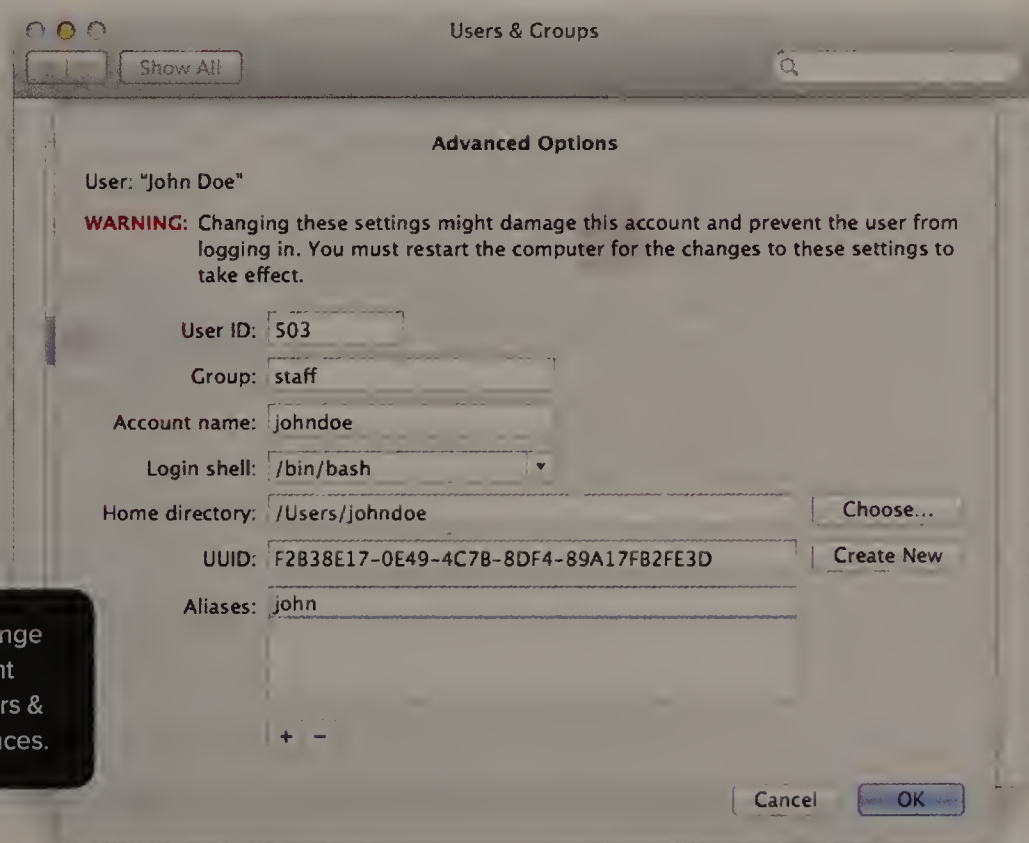
Next, open Terminal, type the following text on a single line, and press <Return>:

```
sudo mv
/Users/oldusername
/Users/newusername
```

When prompted, provide the password of the administrator account you're using, and press <Return> again.

Now restart your Mac. Once you've done so, your short username and your home folder name will be changed. If you find yourself forgetting your new name and typing the old one, you can create a new alias, using your old name as an alias to the new one. (For more on this, see "Use an alias," at left.)—DAN FRAKES

11. You can change the short account name in the Users & Groups preferences.

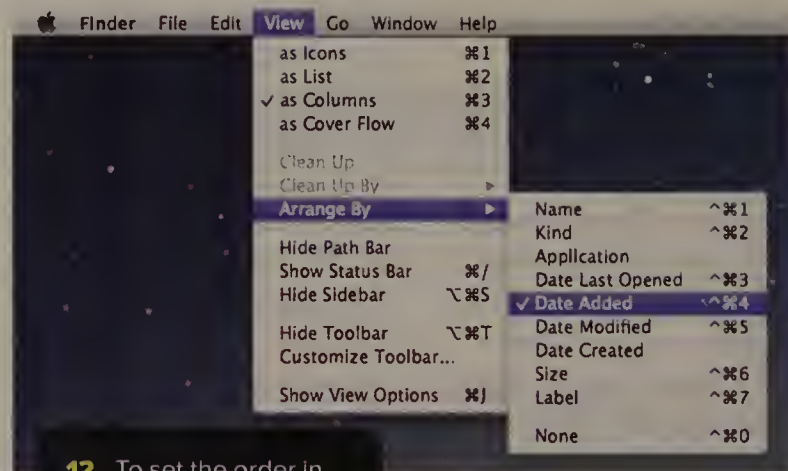




Finder continued

The Difference Between 'Arrange By' and 'Sort By'

12 One way to sort files in Finder windows is to select **View → Arrange By**, followed by a find criterion



12. To set the order in which files appear, select **View → Arrange By**.

('Name', 'Kind', 'Date Added', or whatever). Your system will

use that criterion to sort files and folders in the parent folder you're viewing. Later, when you add new files to the

folder, they'll appear properly in the file hierarchy.

For less long-lasting results, hold down the <Option> key while opening the View menu, and Arrange By will become Sort By. Select that, and it will sort all files that are currently in the folder in the specified order. But this method won't continue to apply the sort criterion to new files; instead, such files will be placed haphazardly, regardless of name, kind, and so on. To bring later additions into order, you must use Sort By again.—DAN MILLER

2 Methods for Creating Aliases and Symlinks

If you've been using a Mac for a while, you know that an *alias* is a tiny file that points to—and acts as—another. For example, an alias on your desktop might provide quick access to a file buried in your user folder.

As a Unix-based operating system, OS X also supports *symbolic links* (also variously known as *symlinks* and *soft links*), which are essentially Unix's version of aliases. You should understand how they differ and how to create both.

Oversimplifying a bit, an alias acts as an enduring reference to an item such as a file, a folder, or a volume. If you move the target item, the alias will still point to it. If you

rename the target item, the alias will still point to it. OS X "remembers" the original file.

In contrast, a Unix symlink acts as a reference to a particular location. (A symlink is a text file containing the path to that particular location.) When the OS opens a symlink, it reads the file path named in the text file and opens the file at that path. If you move the target item, the symlink will no longer work. If you replace the target item with another one with the same name, the symlink will point to that new item.

Most OS X apps are built to work with aliases. But if an app isn't a native Mac app, it may see an alias as nothing

more than a useless little file. On the other hand, any app can work with symbolic links: As far as the app is concerned, a symlink is its target file. And if you want to replace the original file with a different version, a symlink will still work, whereas an alias won't.

One app that treats aliases and symbolic links differently is Dropbox. If you put an alias to your personal Library folder (*yourusername/Library*) in your Dropbox folder, the service will treat it as a document and sync just the alias file. If instead you put a symlink to that Library folder in your Dropbox folder, the service will treat that symlink as your actual Library and thus sync the entire folder across your computers. Now let's look at how to create aliases and symbolic links.

Make Alias (or press ⌘-L, or right-click or <Control>-click the file and select **Make Alias** from the contextual menu).

14 Create a symbolic link

Open Terminal, and type `ln -s /path/to/original/file/filename /path/to/link/linkname`. Let's say that you have a file named 'testfile.txt' located in your Documents folder, and you want to put a symlink to that file on your desktop. To do so, type `ln -s ~/Desktop/testfile.txt ~/Documents/testsymlink.txt`. (If you don't specify a destination path, the symlink will by default appear in the original file's directory.)

If you anticipate that you'll often be creating symlinks, you can use SymbolicLinker (macworld.com/a/1144680), an OS X service that automatically adds a Make Symbolic Link command to the Finder's Services menu.—DAN FRANKS

13 Create an alias

Select the file in the Finder, and choose **File →**

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Finder continued

6 Ways to Reclaim Disk Space

Running out of disk space? It's easy to do, especially on a laptop Mac that has limited flash storage available. When you need more space for your apps and data, try taking these steps.

15 Empty the Trash
Simply dragging files to the Trash doesn't free up the disk space that they occupy. To clear the space completely, you must also choose *Finder* → *Empty Trash*. (Remember to go back and empty the Trash again after performing the other tips in this list!)

16 Restart
Restarting can free up a bit of space by clearing virtual memory swap files, certain caches, and a few other items.

17 Clean out your Downloads folder
Your Downloads folder (at the top level of your home folder, by default) can easily become clogged with clutter. Drag anything you find there that you no longer need to the Trash.

18 Delete duplicates
Don't waste your Mac's precious disk space storing multiple copies of the same file. To find duplicates that you may not even know existed, try a utility like Chipmunk (\$17; go.macworld.com/chipmunk).

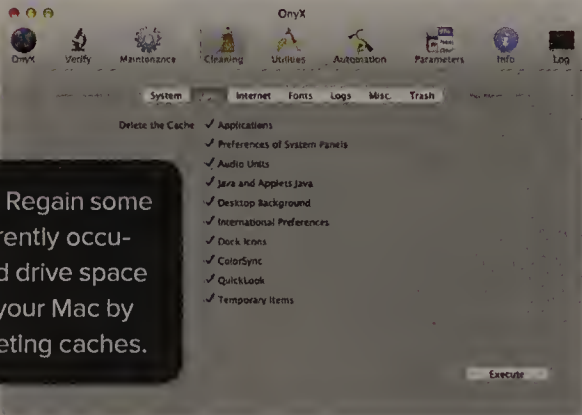


or Hyperbolic Software's Tidy Up (\$30; go.macworld.com/tidyup).

19 Clear caches
Caches generally help your Mac run faster, so deleting them can slow it down—and they'll quickly rebuild themselves anyway. Still, in a crunch, clearing caches might give you some breathing room. The easiest way to find and safely delete caches is to employ a utility such as Titanium's Software's OnyX (donation

requested; go.macworld.com/onyx). Otherwise, you can navigate to your *username/Library/Caches* folder and have at it. (If your Library folder isn't showing, see macworld.com/a/1161156 for a few options.)

20 Try an uninstaller
Because many apps are not self-contained, a well-designed uninstaller can help you find and delete all of the scattered pieces of unwanted apps that came aboard your system.—JOE KISSELL



19. Regain some currently occupied drive space on your Mac by deleting caches.

'Arrange By' Keyboard Shortcuts

21 In any Finder window, you can press the following keyboard combinations to sort files by different criteria.



⌘-<Control>-1	Name
⌘-<Control>-2	Kind
⌘-<Control>-3	Date Last Opened
⌘-<Control>-4	Date Added
⌘-<Control>-5	Date Modified
⌘-<Control>-6	Size
⌘-<Control>-7	Label
⌘-<Control>-0	None

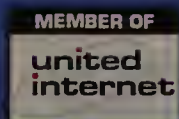
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Desktop & Dock

5 Ways to Take a Screenshot

If you want to show someone what's on your screen (perhaps in order to give or receive technical support), there are many ways to capture an image that shows all or part of your screen, for sharing with others. Here are five practical methods for grabbing a screenshot.

22 Full screen

To capture an image of your entire screen, simply press ⌘-Shift-3 .

23 Selected area

To capture a selected area of the screen, press ⌘-Shift-4 , and then drag the rectangular marquee around the area that you want to include in the screenshot.

24 Window or object

To capture a window, a

menu, an icon, or any other on-screen object (along with its drop shadow, if there is one), press ⌘-Shift-4 , press the spacebar, and then click the object that you want to obtain a screenshot of.

The preceding three commands (for full-screen, selected-area, and window or object screenshots), save the captured image as a file on your desktop. If you would prefer to copy the image to your Clipboard, add the ⌘-Control key to the shortcuts listed above.



24. Most screen-grab utilities let you capture a whole window or all or part of the screen.

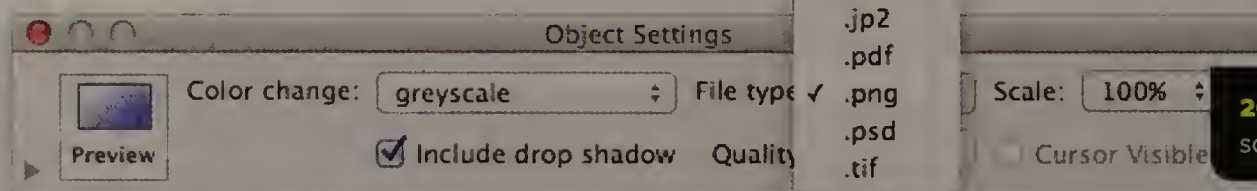
25 Grab

For more capture options—including a time-delay feature, the ability to choose how the cursor appears, and the option to have your system emit a confirmation sound when you make a capture—use the Grab app that comes built in to OS X (in /Applications/Utilities).

26 Third-party utilities

If you need more capabilities than OS X's Grab can provide—

for example, the ability to specify file formats on the fly, or to scale a screenshot's size—you have many screen capture utilities to choose from. Among the most popular of these are Ambrosia's Snapz Pro X (\$69; go.macworld.com/snapzprox), Realmac Software's LittleSnapper (★★★★; \$40; go.macworld.com/littlesnapper), and Skitch (★★★★½, free; Plus account, \$20/year; go.macworld.com/skitch).—JOE KISSELL



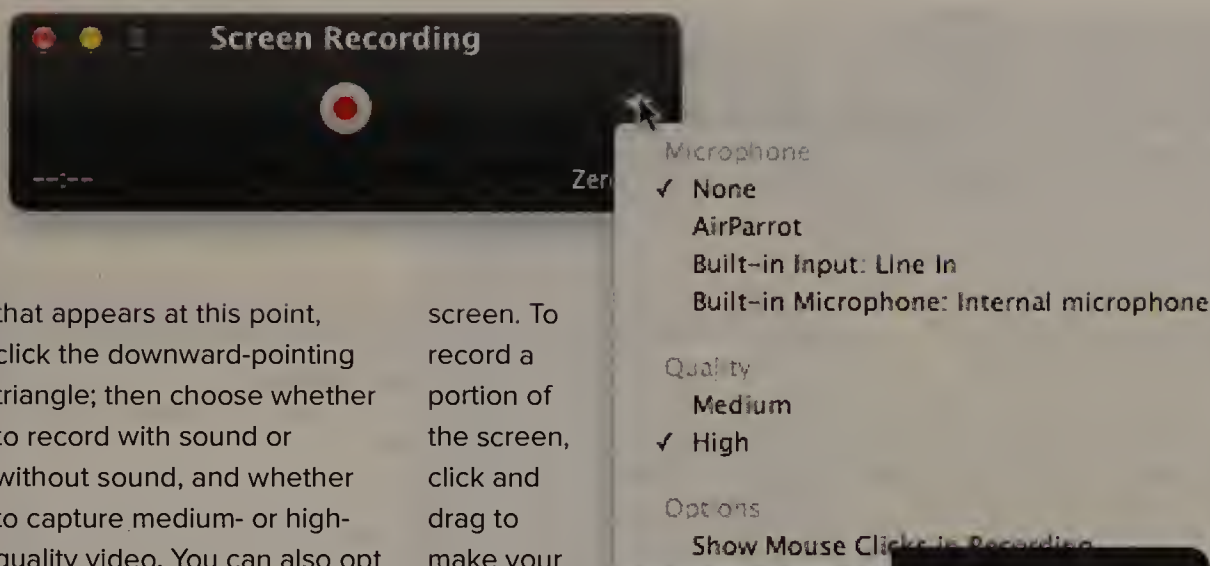
26. Snapz Pro X lets you capture screens in any of eight formats.

Create a Motion Capture of Your Mac's Screen

27 Launch QuickTime Player and choose *File* → *New Screen Recording*. In the Screen Recording window

that appears at this point, click the downward-pointing triangle; then choose whether to record with sound or without sound, and whether to capture medium- or high-quality video. You can also opt to show mouse clicks in your recording. To commence the capture, click the red *Record* button. To record the entire screen, click anywhere on the

screen. To record a portion of the screen, click and drag to make your selection and then click within the selection. To end your recording, simply click the *Stop* button.—CHRISTOPHER BREEN



27. Select the microphone, video quality, and mouse-click visibility you want in QuickTimePlayer.



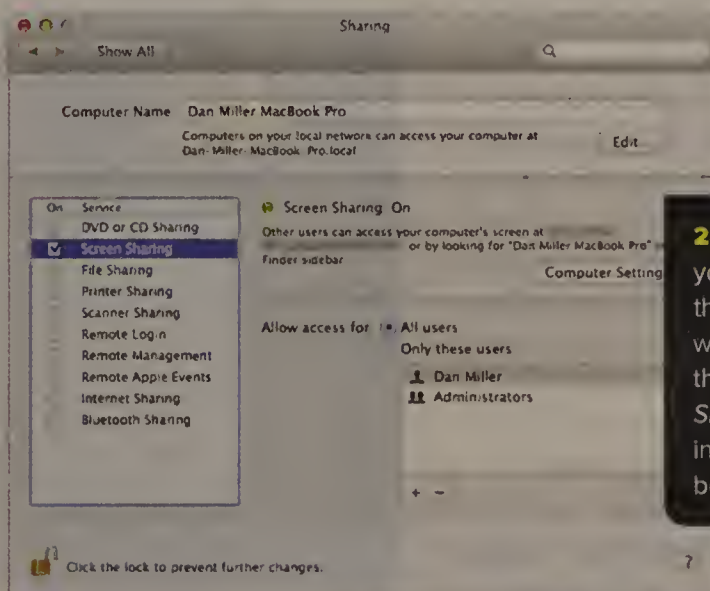
name and password for the Mac that you intend to control (or choose to log in with an Apple ID supported by that Mac). You should be screen-sharing in no time.

29 Remotely If you want to control a Mac that isn't on your Mac's local network, sign up for a free AIM account (www.aim.com) on each system, using a different account for each. On each computer, launch the Messages application; in its Accounts preference, click the

plus (+) button and configure your AIM account. Click the *Video* menu, and select *Screen Sharing Enabled* on both Macs. Now, when each Mac has Messages running, you can select the other Mac and choose to share its screen. Alternatively, you can sign up for a free LogMeIn (secure.logmein.com) account. Install the free LogMeIn server application on any Mac you wish to screen-share with, and you can access and control that Mac through a Web browser.—CHRISTOPHER BREEN

2 Ways to Share Screen

28 Locally If your Mac is set up on the same local network as the Mac that you wish to control remotely, you just need to ensure that Screen Sharing is enabled on both Macs (*System Preferences* → *Sharing* → *Screen Sharing*). In a Finder window's sidebar, select the Mac you wish to control or view, and then click *Share Screen*. Enter a user-



28. To share your screen on the local network, check the *Screen Sharing* option in the Sharing box.



System

2 Ways to Make a Clean Migration to a New Mac

When you get a new Mac, you may want to transfer some of the apps and data from your old Mac, but leave behind all the useless cruft and clutter.

Unfortunately, you have no clean way to transfer only the specific applications and data you want while still guaranteeing that all necessary components and files are preserved. That's because many OS X apps are not self-contained. Instead, they store pieces in a variety of folders—and sometimes these pieces are invisible or have hard-to-identify names.

30 Use Migration Assistant

The easiest and most reliable way to move stuff to your

new Mac is to connect the two Macs with a FireWire or ethernet cable and use Migration Assistant. You'll find this utility located in /Applications/Utilities; it's built into the Setup Assistant that runs automatically

“Migration Assistant lets you select or deselect only broad categories of things to move.

the first time that you turn on a new Mac.

Regrettably, Migration Assistant lets you select or deselect only broad categories of things to move; you can't, for example, choose some apps but not others, or only a few subfolders within your Documents folder.

31 Reinstall apps

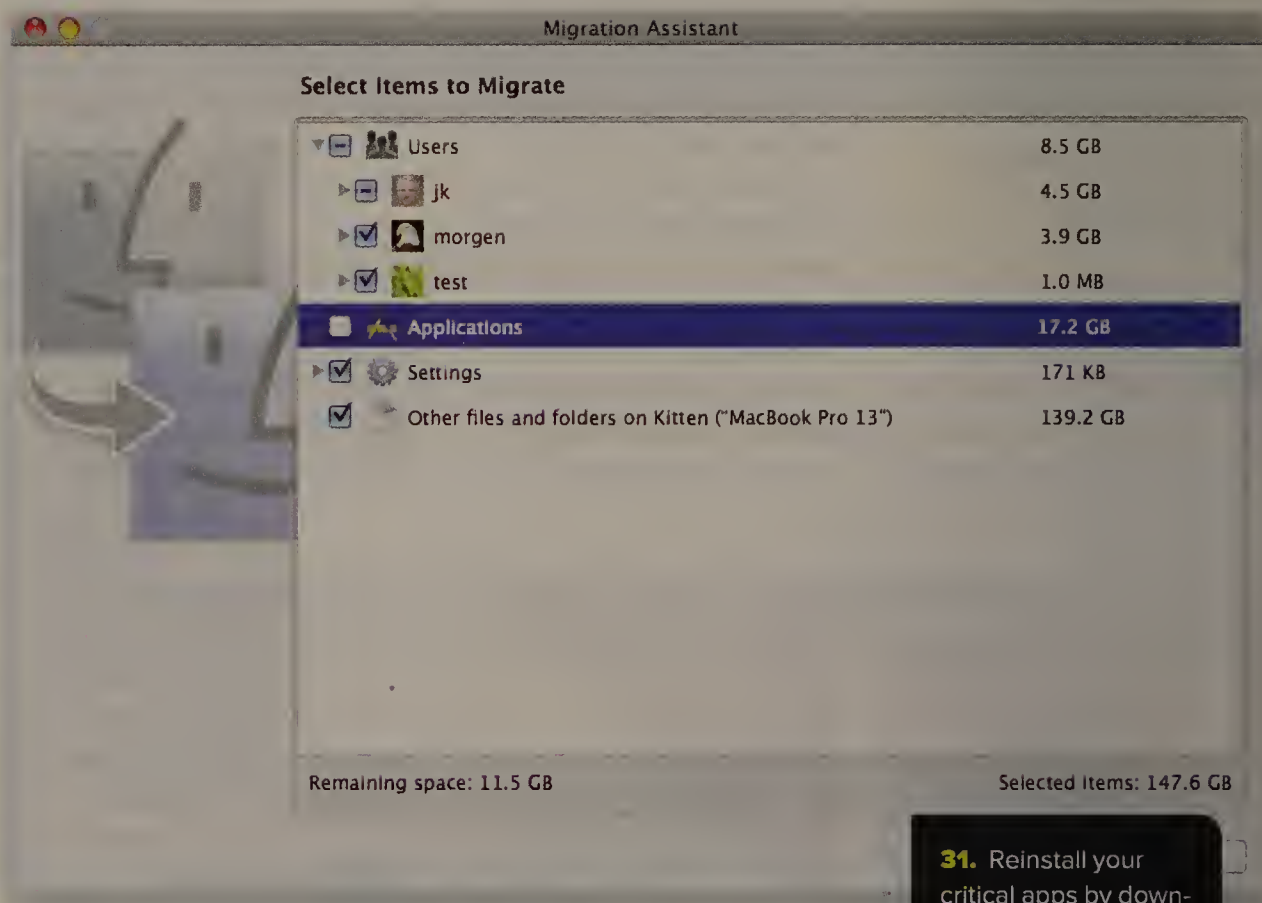
As a compromise, I suggest that when running Migration Assistant, you deselect *Applications* and *Other files and folders on [Volume Name]*, but leave *Settings* and all its subcategories selected along with all the user accounts and their corresponding subfolders. Finish starting OS X and then log in.

31. Reinstall your critical apps by downloading them again or using fresh copies.

Now you can reinstall all your critical apps in two ways: You can either download them from the Mac App Store, or use fresh copies that you obtained directly from the developers.

This process may take a while, but it will lead to much less clutter, and it will allow you to enjoy the latest, most up-to-date apps.

In case you are not able to install an application from scratch for some reason, you can run the Migration Assistant utility a second time. This round, select only *Applications* and let the utility copy everything (including all the extra clutter).—JOE KISSELL



6 Ways to Troubleshoot a Web Connection

If you can't get to a webpage, try the following steps.

32 Check your Internet connection

The first thing to do is to confirm whether you can access other websites. If you can, your connection is fine.

33 Check the Wi-Fi menu

This is to make sure your Mac hasn't dropped its connection; if it has, try reconnecting.

34 Try another device

If another Mac, an iPhone, or

an iPad on the same network can connect to the website that you are having trouble with, then restart your Mac and try again.

If this doesn't work, try restarting your DSL or cable modem followed by your AirPort base station or other Wi-Fi router, if any. If you do all that and your connection is still down, it's time to call your Internet service provider.

35 Check the site

If your Internet connection, your Mac, and your browser all appear to be working correctly, then visit

Down for Everyone or Just Me? at www.isup.me and enter the URL you're trying to reach. This site does what its name says, and tells you whether a site is truly down. If it is, then the cause is likely to be a server problem—and

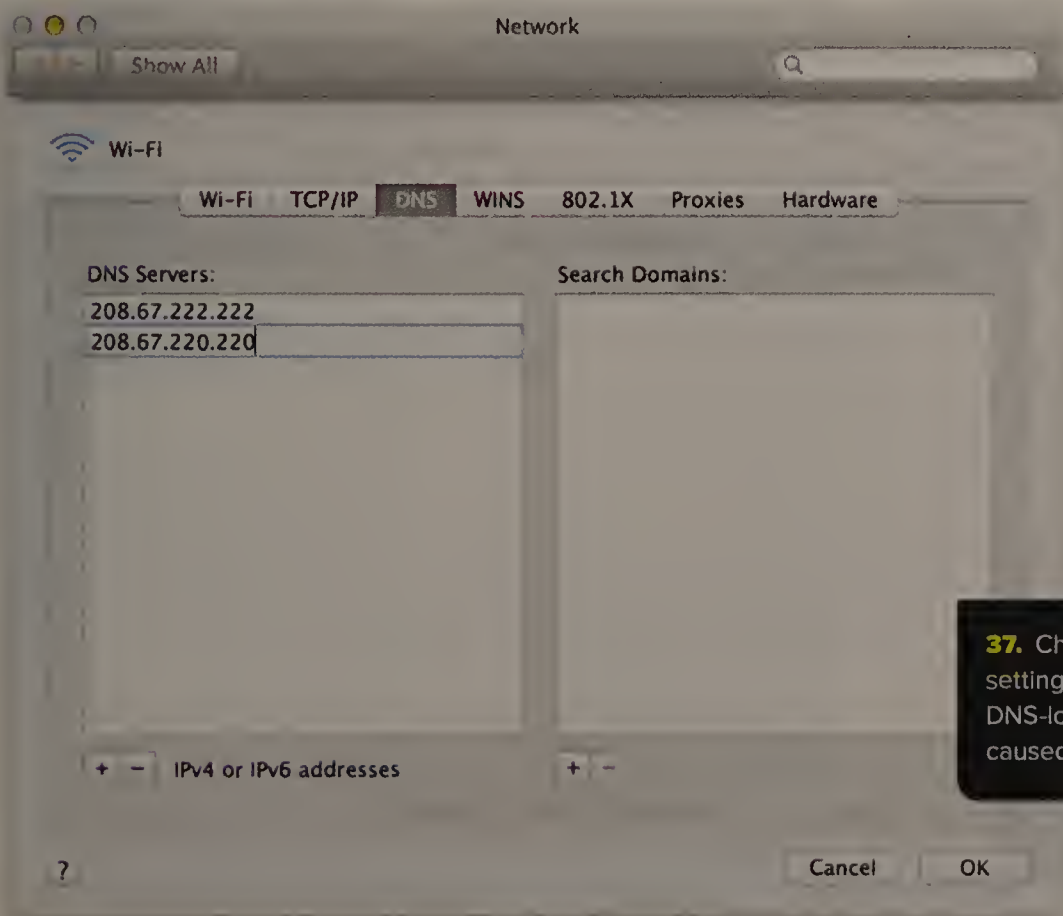
you can't do much except wait for it to come back up again.

36 Switch to a different browser

If multiple browsers show the same behavior, but the website is up for everyone else, then you might be experiencing a DNS problem.

37 Change your DNS settings

Open the Network pane of System Preferences, click the lock icon, and enter your username and password. Next, select your current network connection, click *Advanced*, and click *DNS*. Click the plus (+) button and add two new DNS servers to the list: **208.67.222.222** and **208.67.220.220**. These DNS servers, operated by OpenDNS, can frequently bypass DNS-lookup problems that might be afflicting your local Internet service provider. Click *OK* and then *Apply*, and try loading the webpage again.—JOE KISSELL





Applications

9 Things to Do When an Application Crashes

You just launched an application, one that you have used many times before. But this time, it crashes. Or it freezes, and you have to Force Quit it. Now what?

38 Launch it again

If an application is going to crash, it will typically do so as soon as you launch it. Occasionally, if you simply relaunch the application, it will start working again. So, click the *Reopen* button in the dialog box that appears after a crash.

39 Restart your Mac

Sometimes a combination of events on your system can cause an app to crash with each relaunch. Restarting the Mac clears the slate and puts the app back in business.

40 Check for updates

Are you using the latest version of the app? If not, update it, especially if it's a third-party app and you have recently updated OS X.



41 Eliminate suspects

Maybe the app crashes only when another specific program is also open. Close all your apps, and then reopen the one that crashes. If it survives the launch, open your other apps one by one to see if you can replicate the crash conditions.

42 Work around it

Sometimes an app crashes when you perform a

certain action, such as selecting a particular menu item or pressing a keyboard shortcut. Try to find a work-around that bypasses the cause of the crash.

43 Find out what other people did

Search the Web for *name of application crash*. Other users may have encountered the same problem, and some may have found a solution.

44 Check the crash report

A crash dialog box typically has a *Report* button. Click it and select the *Problem Details* tab. While the resulting text will make no sense to most Mac users, it might contain some tidbit that indicates the source of the problem, such as the name of a second app that may be contributing to the crash.

45 Contact the developer

Go to the developer's website and look for the *Support* section. You may find something that didn't show up in your Web search. If you can't find anything, ask the developer.

46 Reinstall the app

If the app offers an uninstaller, use it, and then reinstall. If no uninstaller exists, drag the app to the Trash and replace it with a new copy. This method is less preferable than an uninstaller because many apps have important files that are located in Library folders, and one of those may be the culprit. By only replacing the main app, you don't deal with those other files.—TED LANDAU

38. When an app crashes, first try to reopen it from this dialog box.



EOS Utility quit unexpectedly.

Click *Reopen* to open the application again. Click *Report* to see more detailed information and send a report to Apple.

Ignore

Report...

Reopen

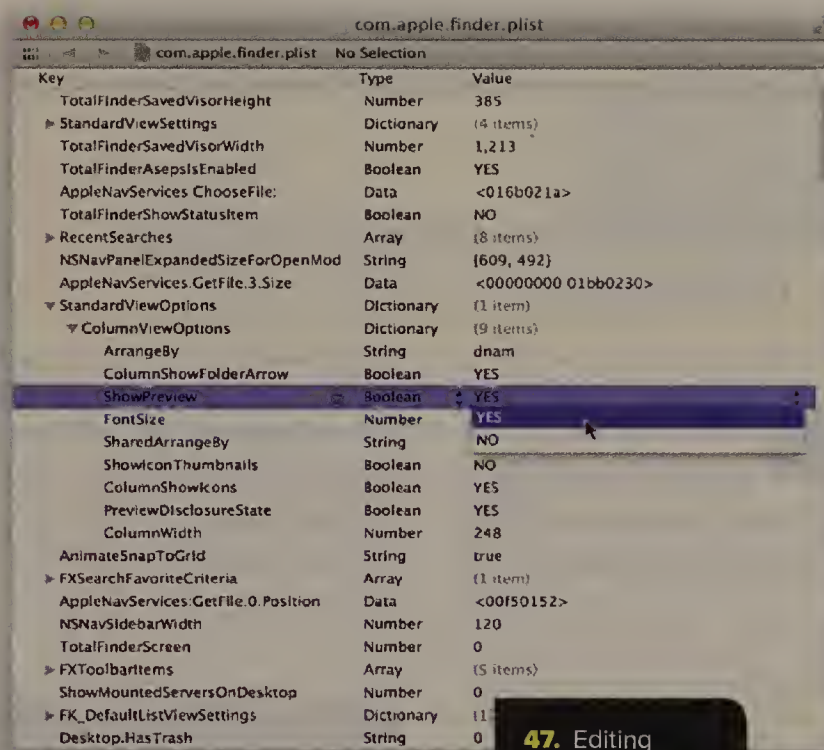
2 Ways to Change Hidden Settings

47 Preference files

To adjust settings that you can't change in an app's preferences panel, try editing its preference files directly. Normally you'll find them stored as property list (.plist) documents—plain-text files in XML format, which you can open and edit in any text editor. If you have Apple's free Xcode developer software (go.macworld.com/xcode), double-clicking a .plist file opens it in Xcode, which offers a convenient,

database-style view of it.

You're most likely to find preference files in either `/Library/Preferences` or `username/Library/Preferences`. To see the latter location, hold down `<Option>` while choosing *Library* from the Finder's Go menu and then, within that folder, navigate to `Library/Preferences`. Preference files use a reverse-domain naming scheme; for example, the preference file for the Finder is `com.apple.finder.plist`.



47. Editing a .plist file in Xcode gives you a graphical view of the data.

Before editing one of these files, quit the application that created it and `<Option>`-drag the .plist file to your Desktop to make a copy (in case something goes wrong). Then open the

original file in the text editor of your choice, make any desired changes, save and close the file, and reopen the app. (How do you know what changes you can make? Web searches and guessing are the most common techniques.)

```

Last login: Wed Feb 6 11:31:38 on ttys000
15:03:08 ~: defaults write com.apple.iCal CalUIUseSystemHighlightColorForToday -bool TRUE
15:03:54 ~: defaults write com.apple.iCal CalUIUseSystemHighlightColorForToday -bool FALSE
15:03:59 ~: defaults write com.apple.helpviewer DevMode -bool true
15:04:27 ~: defaults write com.apple.helpviewer DevMode -bool false
15:04:33 ~: defaults write com.apple.dashboard mcx-disabled -boolean true
15:04:50 ~: defaults write com.apple.dashboard mcx-disabled -boolean false
15:04:53 ~: defaults write com.apple.iCal CalUIDebugDefaultDaysInWeekView 14
15:05:09 ~: defaults write com.apple.iCal CalUIDebugDefaultDaysInWeekView 7
15:05:12 ~:

```

48. For some hidden settings, you can use the 'defaults write' command in Terminal.

48 Defaults Write

The other way to edit .plist files is to open Terminal and use the **defaults write** command followed by the name of a preference file and a specially formatted value. You'll often find directions online that explain this procedure, including the complete text of a command to alter a particular preference.—JOE KISSELL

Security

Change the Administrator Password

49 If you ever forget your account password, and you're running OS X 10.7 (Lion) or 10.8 (Mountain Lion)

with a Recovery HD partition, you have an easy way to reset that password. (Note: This procedure doesn't work

if you have enabled OS X's FileVault encryption feature.)

Start up your Mac while holding ⌘-R, and release the keys once you see the familiar gray Apple logo. When your Mac enters recovery mode (it shows you the OS X Utilities screen), choose *Utilities* → *Terminal* to launch the Terminal utility. Type **resetpassword** and press <Return>. In the Reset Password window, select your

startup volume, and choose your account (the one for which you want to change the password) from the pop-up menu. Enter a new password for the account, and then enter it again to confirm. Add an optional password hint for the new password. Click *Save*. Quit the Reset Password utility, quit Terminal, choose *OS X Utilities* → *Quit OS X Utilities*, and click the *Restart* button.—DAN FRAKES

5 Ways to Avoid Phishing

Even if you resist the temptation to send your life's savings to a recently exiled Nigerian president, you can still be victimized by phishing attacks. Take steps to defend yourself.

50 Use a cloud-based email spam filter

Services such as iCloud and Google Mail include this feature, which will stop a lot of phishing efforts.

51 Replace your email client's junk filter

Install the excellent Spam-



Sieve (★★★★; \$30; go. macworld.com/spamsieve), and take some time to train it.

52 Keep your browser up-to-date

And once you do, be sure its phishing and malware protection, which checks all Web

addresses against a list of known bad sites, is turned on. In Safari, go to *Settings* → *Security*; in Chrome, find it under *Settings* → *Advanced* → *Privacy*.

53 Use different email addresses

Try using a dedicated address

or alias for known financial and retail sites, but using a different one for less-trusted sites. iCloud supports up to three mail aliases that you set by logging in to iCloud.com and going to *Mail* → *Settings* → *Accounts*. I suggest one for banks, one for trusted retailers (such as Amazon), and one for junk sites. Alternatively, you can create as many Gmail (or Yahoo) addresses as you like. If you never use your bank email address for anything other than banking, and notice spam on it, your bank may have been compromised.

54 Use a throwaway email address

For truly junky sites, use an email address from Mailinator (www.mailinator.com). These one-use addresses aren't secure, but they are good for sites that have no legitimate need for your real email address.—RICH MOGULL

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8 Ways to Avoid Malware

Yes, there really is malware for Macs, but you can avoid it.

55 Upgrade to Mountain Lion

It has some important built-in protection against malware.

56 Isolate Flash and Java

These are two of the biggest security headaches. Uninstall Flash using the uninstall tool from Adobe. Then download Google Chrome, which includes its own sandboxed version of Flash. You'll either

have to switch to Chrome as your primary browser or use it whenever you navigate to a Flash-enabled site. (Don't forget to review the browser's privacy settings.)

57 Install the latest version of Java

If you really need Java, get Java 7. Note that, because Java 7 is 64-bit and Chrome is only 32-bit, this version of Java will work only in Safari. Disable it (*Safari Preferences* → *Security*, uncheck *Enable Java*), and turn it on only when you need it.

58 Enable Gatekeeper in default mode

Go to *System Preferences* → *Security & Privacy*, and in the box titled 'Allow Applications Downloaded from', select the option *Mac App Store and Identified Developers*.

59 Use an email filter

Try using an email provider, such as iCloud or Google, that filters malware.

60 Apply plug-ins

You can block potentially compromised ads in

your browser with a plug-in such as Adblock Plus.

61 Use a firewall

Use an outbound firewall such as Little Snitch (🔒🔒🔒🔒; \$35; go.macworld.com/snitch) to catch any malware that sneaks through.

62 Use a virtual machine

If you need to visit a really risky site, use a virtual machine in Parallels or VMWare Fusion, restoring it to a baseline snapshot afterward.—RICH MOGULL



56. Uninstall Flash from the Flash Player settings page.

8 Places Smart Browsers Never Visit

63 Questionable websites

Avoid the obvious trifecta of pornography, gambling, and illegal download sites.

64 Forum links

Automated attack tools

can make links posted in forums of any type dangerous. Use extra caution, no matter how innocuous the site seems.

65 Image search

Google or Bing image search can also lead to in-

fected sites. A family member of mine got infected hunting for birthday cake photos.

66 Free games

Ignore any site pushing free games that require Java or a download, but that aren't signed for Gatekeeper.

67 Suspicious links

Avoid any link sent by a friend in email (usually to multiple people) with a subject line like "Pictures of you," "Check out this link," or "You have to see this." Call your friend on the phone and tell them they've been hacked.

68 Twitter links

Bypass any link on Twitter from a follower you've never heard of, sent within minutes of your last tweet, usually with "Check this out."

69 .ru or .cn links

Don't visit URLs that end with .ru or .cn, unless you are Russian or Chinese.

70 Old sites

Skip any website with a blink tag, the Comic Sans font, and/or a tiled image background. Odds are, no one has maintained it since 1996.—RICH MOGULL

Security continued

8 Ways to Hide Files and Folders

71 Enable File Vault

You can go to your Mac's System Preferences' Security & Privacy pane and turn on File Vault to encrypt your entire hard drive.

72 Put them in the Library

Assuming that your Library folder is hidden (which is the default in OS X Lion and OS X 10.7 Mountain Lion), hold down the <Option> key as you open the Finder's Go menu to navigate to that Library folder, and then drag files and folders into it.

73 Put them in another user account

You can create a new user in System Preferences' Users & Groups preference, copy files to that user's Public folder, log in as that user to move your files out of the Public folder, and then log back in as yourself. Remember to delete the original files.



74 Move to hidden folder 1

In Terminal, type **chflags hidden** and then drag a folder that you want to hide

from the Finder into the Terminal window.

You can still access those hidden folders by summoning the Go To Folder dialog box

(⌘-<Shift>-G) and typing in their full paths.

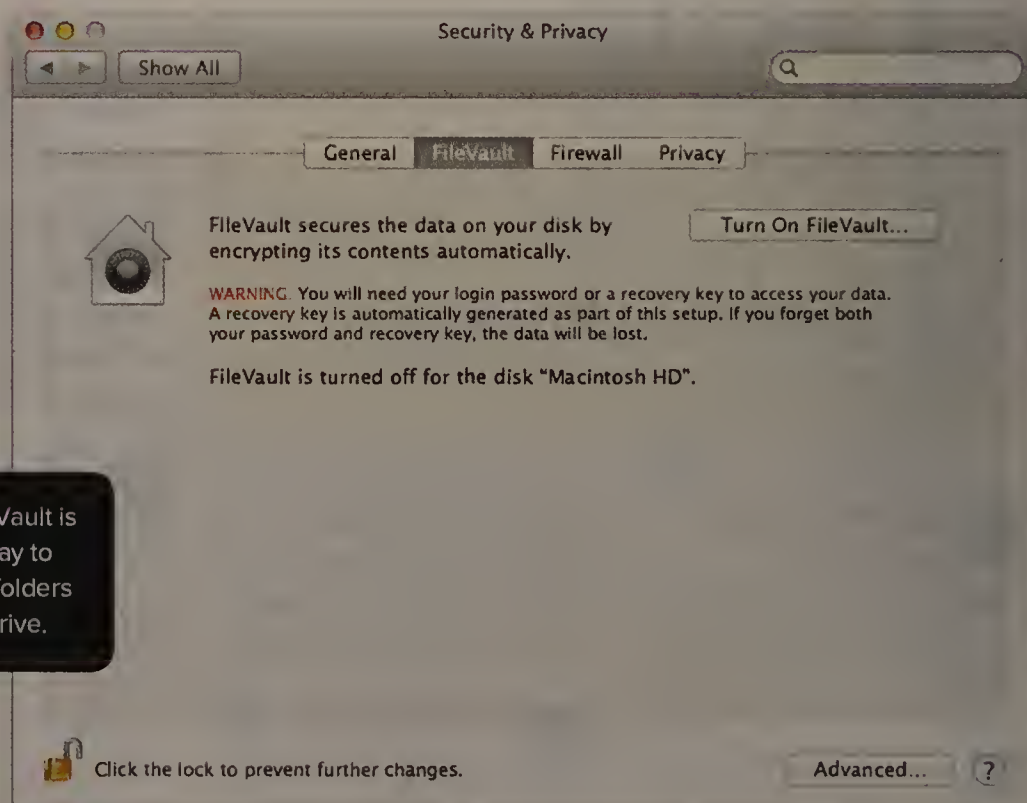
If you want to unhide the folders, all you need to do is go back to Terminal and type **chflags nohidden** followed by the file path.

75 Move to hidden folder 2

Again in Terminal, type **mv foldername.foldername**. This moves the original folder to one with a period at the beginning of its name. In Unix, folders with a period at the beginning of their names are considered system files and so are hidden. (You can't add a period to the beginning of the name in the Finder, because that will result in an error message.)

You can also type **mkdir .hiddenfolder** to create a

71. Using File Vault is the simplest way to hide files and folders on your hard drive.



new hidden folder.

In either case, you'll be able to gain access to the hidden folder by using the Go To Folder option.

76 Hide in plain sight
Try using innocent-sounding file and folder names such as **Cat videos** **January 2013 – LOL!** instead of the more intriguing

Nuclear trigger codes and the like.

77 Set visibility attribute to invisible
If you have access to Apple's Developer Tools, go to Terminal and enter **setfile -a V** followed by the name of the file. That sets its visibility attribute to invisible. You can undo this by using a lowercase **v**.

78 Use a third-party utility

You can also try various third-party security software such as Apimac's Secret Folder (\$20; go.macworld.com/apimac), Altomac's Hide Folders (\$20; go.macworld.com/altomac), and MacPaw Software's Mac Hider (\$10; go.macworld.com/macpaw).
—STEVE McCABE

“

In Unix, files and folders with a period at the beginning of their names are hidden.

3 Ways to Surf the Web Anonymously

On some occasions you might want to visit a website without revealing anything about yourself (such as your IP address or operating system) to the site itself, your ISP, or any other networks through which your data passes. You may also wish to keep your surfing hidden from hackers who might be eavesdropping on public Wi-Fi networks, and prevent records of your activity (such as browsing history and cookies) from being stored on your Mac.

79 Private browsing
Most Web browsers have a private browsing mode (for example, in Safari, choose **Safari → Private Browsing**), but that addresses only part of the problem. A private browsing mode prevents your browser from storing information about

where you have been. However, it doesn't prevent the websites you visit from knowing your IP address (and therefore your approximate location) as well as other details that could be traced to you. Furthermore, even with private browsing enabled, your Mac can cache DNS lookups, and browser exten-

“

Most browsers have a private browsing mode, but that addresses only part of the problem.



sions or plug-ins can store their own caches and cookies.

80 Proxy server

You can address the problem piecemeal by using a proxy server or VPN (virtual private network) to hide your true IP address, a browser's private mode to prevent local data storage, a browser extension to disguise your operating system, and so on.

81 Browser bundle

The easiest solution is to download and install a

software bundle that handles all of these privacy measures for you at once: the free Tor Browser Bundle (go.macworld.com/torbundle). It includes “onion router” software to redirect your Web traffic through a series of anonymous proxies, as well as a custom Mozilla-based browser with an optional private browsing mode (choose **Tools → Start Private Browsing**).

Just beware: All those redirects and intermediate servers make Web browsing much slower.—JOE KISSELL



Terminal

Customize Your Terminal Prompt

82 When you open Terminal, you see the blinking cursor and, depending on your setup, your username, the current time, the current directory, or other such information. But do you know how to customize that prompt? Here's how.

In Terminal, type **nano .bash_profile**. That'll put you in the nano text editor; don't panic. Now

type **export PS1=""**, but between those quotation marks put your choice of the following switches:

\W	The current directory
\w	The current directory, with the full path
\h	Your computer's host name (that is, your computer's network name)
\u	Your username
\d	The current date
\t	The current time

Note that you can also add any spaces, colons, dashes, and so on that you'd like to make the results look good.

When you're done, press <Control>-X (to exit), then Y (to confirm that you want to save the file), and then press <Return> to exit back to the command line. When you restart Terminal, your newly customized prompt should be in place.—DAN MILLER



Search

7 Google Search Operators You Should Know

Smart searchers know they can narrow their searches by using Google search operators. (You can place most of these terms anywhere in your query; those beginning with **all** need to come at the beginning.)

83 filetype: This search operator restricts the results to items of a specific filetype. Entering **puppies**

filetype:jpg will get you lots of puppy pictures.

84 intext/allintext: Finds pages containing a specific string of text. For example, **Beatles breakup intext:Paul McCartney** finds pages containing Paul's name and the words *Beatles*, *breakup*, or both. The operator **allintext** goes at the start of the search field and forces Google to return only those pages that contain all of the following search terms.

85 intitle/allintitle: Similar to **intext**, this search operator searches for specified terms in the title of webpages.

86 inurl/allinurl: This acts like **intext** and **intitle**, but works on URLs.

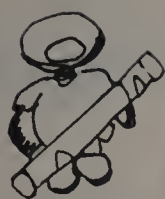


87 link: This finds pages linked to the specified URL. **link:myblog.com** will find pages linking to your blog.

related:myblog.com should find other pages as obsessed with rodents are you are.

88 related: This search finds pages similar to the one you specify; **hamsters**

89 site: This is perhaps the handiest, as it finds the search terms on a specific website.—DAN MILLER



Automator

5 Useful Automator Workflows

90 Wrap selected text in quotes

Create a new Service workflow. In the header area, tell it to process selected text in any application. Click the *Output replaces selected text* checkbox. Drag the Run AppleScript action to the workflow, and enter the following:

```
on run {input, parameters}
    return "\"" & (input as string) & "\""
end run
```

Save the finished workflow. Now when you select some text, and right- or <Control>-click it and choose *Services*, you should see your service. Click that, and the selected text should appear in quotes.

91 Get a word count

Create a new Service workflow and set it to process selected text in any application. Leave the *Output replaces selected text* checkbox unchecked. Then add the Run AppleScript action to the workflow, and enter:

```
on run {input, parameters}
    set theWordCount to
    count words of (input
    as string)
    display dialog
    (theWordCount & " words
    in the selected text."
    as string)
end run
```

Save the workflow. Select some text, open the *Services* menu, and choose your service to get the word count.

92 Create a subfolder

Create a new Automator Service workflow and set it to process folders in Finder. Add the 'Set Value of Variable' action to the workflow; from its pop-up menu, create a new variable, and name it **folder**. Add the New Folder action to the workflow. Enter the name **subfolder**, or something else. Drag the folder variable from the Variable area to the Where pop-up. Finally, with the action

selected, choose *Action* → *Ignore Input* from the menu bar. Save the workflow. Your new service should now appear under *Services*. Select a folder, choose this service, and you should have your subfolder.

93 Add dates to files

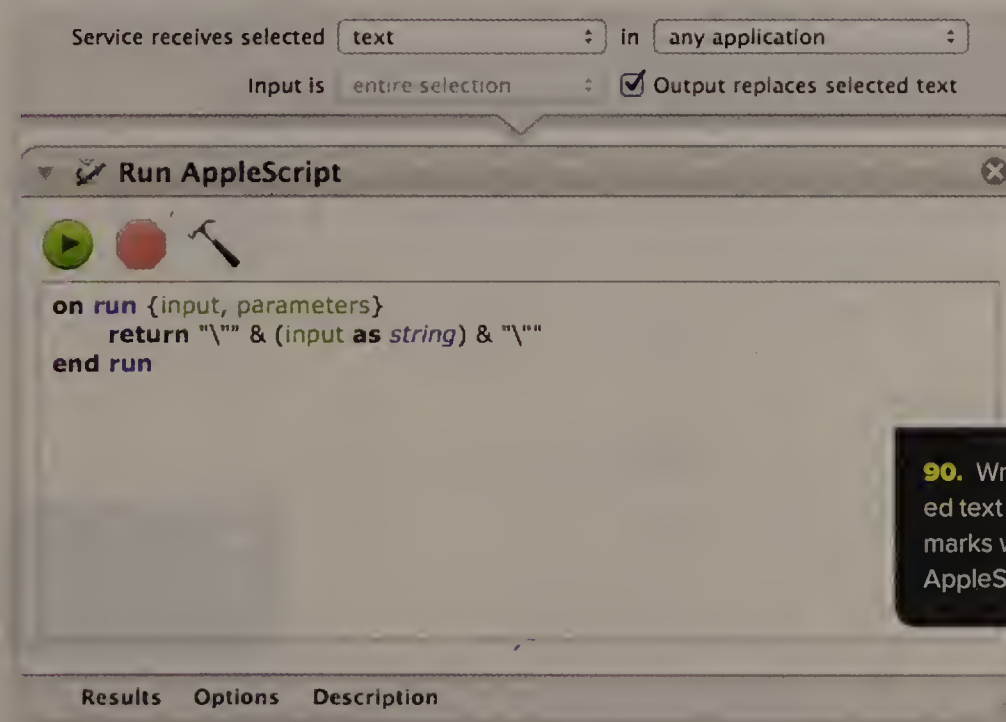
Create a new Automator Service workflow and set it to process files in Finder. Drag the Rename Finder Items action to the workflow. When Automator prompts you to insert a Copy Finder Items action, click *Don't Add*. Configure the action to Add Date or Time. Set the Date/Time to *Current*, the Format to *Year Month Day*, the Where to *Before name*, the first Separator to *Dash*, the second Separator to *Space*, and click the *Use Leading Zeros* checkbox. Save the workflow. It'll show up in Finder's *Services* menu. Select a file or folder, then choose the service, and the date should be added.

94 Toggle hidden files

Create a new Automator Application workflow. Add the Run AppleScript action to your workflow, and enter the following:

```
if {"OFF", "FALSE"}
contains (do shell
script "defaults read
com.apple.finder
AppleShowAllFiles") then
    set theValue to
    "TRUE"
else
    set theValue to
    "FALSE"
end if
do shell script
("defaults write com.
apple.finder
AppleShowAllFiles " &
theValue) as string
do shell script
"killall Finder"
```

Save the workflow and then put it wherever you like. When you want to see hidden files, all you have to do is double-click it.—BEN WALDIE



Preview

2 Ways to Fill Out a PDF Form

95 Type text

Apple's Preview app lets you fill in PDF files that have fillable form fields, such as tax forms you download from the IRS website. For such documents, simply click in a

field and start typing. (You can also check or uncheck a box by clicking it.) When you're done, save the document and then print or email it as you would any other document.

If you encounter a PDF with

blanks to be filled in but no fields that accept typed data, you can still type text onto it in Preview. Choose *Tools* → *Annotate* → *Text*, drag a rectangle to define the area you want to type into, and start

typing. You can then use the controls on the Annotations toolbar to adjust font, size, color, and other attributes.



95. Insert text using *Tools* → *Annotate* → *Text*.

96. Sign PDF forms using Preview's *Tools* → *Annotate* → *Signature* option.

96 Sign documents

If the document needs a signature, get a piece of white paper and sign your name on it in ink. Choose *Preview* → *Preferences*, click *Signatures*, and then click *Create Signature*. Hold the paper with your signature up to your Mac's built-in camera, line it up following the on-screen directions, and click *Accept*. Now return to your document, click the tiny *Signature* icon on the Annotations toolbar (if it's not already highlighted in blue), and then click where you want your signature to go.

—JOE KISSELL



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Messages

4 Things to do With Messages

The Messages app is obviously great for exchanging messages with other Mountain Lion and iOS users. But it can do much more.

97 IM anyone

Messages works with AOL Instant Messenger, Google Talk, Jabber, and Yahoo. Among the third-party networks that support Jabber for chatting is Facebook: You can create a Jabber account in Messages with **your Facebook username@chat.facebook.com** as the account name, **chat.facebook.com** as the server, and **5222** as the port (leaving the other default options unchanged).

98 Send SMS

To send text messages to people who aren't using iPhones, first log in to your AIM account. Then, send a message to the contact you would like to IM, using his or her phone number. Make sure to fully qualify that number—that is, prefix it with a plus (+) symbol and a 1, followed by the area code and phone number itself.

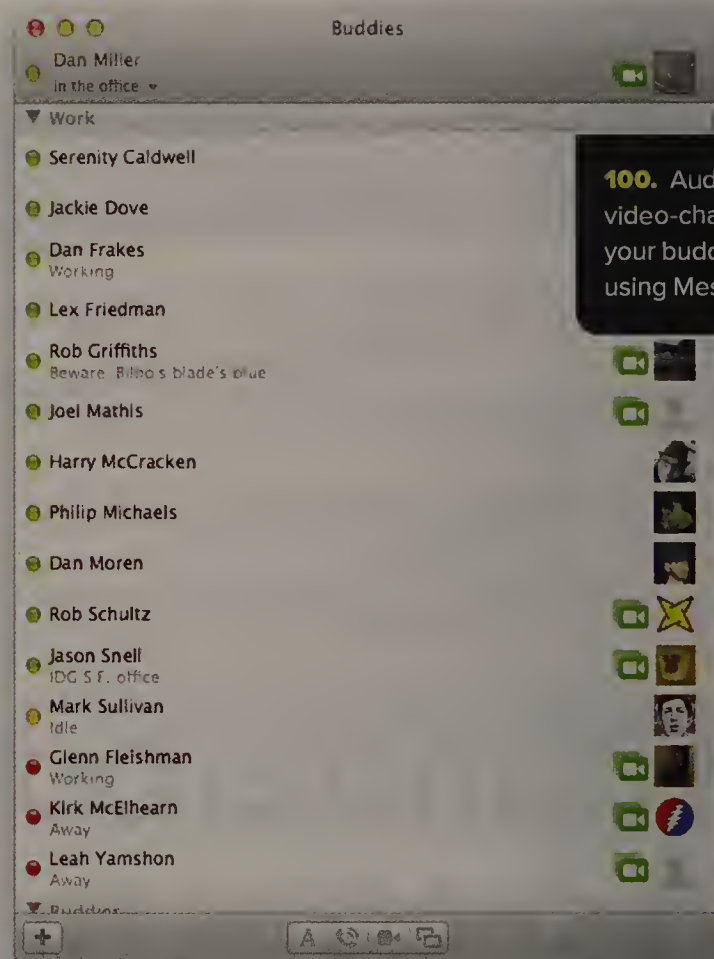
99 Share files

Drag the file you want to send into the app; send folders as .zip files. If you send files via iMessage, recipients will be able to open them on an iOS device if they have an appropriate app for that file.

100 Conduct video and audio chats

While Apple's video-chatting focus is clearly centered on FaceTime, Messages is also capable of hosting AIM-based videoconference sessions.

People on your buddy list with whom you are able to



100. Audio- and video-chat with your buddies using Messages.

video- or audio-chat will sport an extra green icon to the right of their name. A phone icon indicates that the buddy can handle audio-only chats; a camera instead indicates

that the buddy can handle video chats (and screen sharing). All you need to do is click the green button to initiate the audio or video call.—LEX FRIEDMAN

“Messages is also capable of hosting AOL Instant Messenger video-conference sessions.”

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Working Mac

Tips, Tricks, and Tools to Make You and Your Mac More Productive

Power Tips for Safari 6

Browse better with these timesaving techniques.

BY SHARON ZARDETTO

How often do you use your Web browser? If the answer is constantly, then following these simple tips for Safari 6 could save you loads of time and trouble.

Bookmark a Page Instantly

Create a new bookmark on the bookmarks bar by dragging the current page's *favicon* (the icon in front of the URL) from the address field into the bookmarks bar. The bookmark's default name will be selected, so you can immediately type a new name.

Cut Through Your Bookmark Clutter

Overwhelmed by bookmarks? The first



bookmarks window (*Bookmarks → Show All Bookmarks*, or \mathbb{A} -<Option>-B), and drag a folder from the window's sidebar to the desktop. This action copies the folder to the desktop, and the contents automatically sort by name.

You can't drag the sorted folder back directly into the Safari sidebar; so, instead, drop it into the list area of the bookmarks

Rename a Bookmark

Quickly rename an existing bookmark in the bookmarks bar by pressing it—that is, by clicking and holding down the mouse button or trackpad instead of just quickly clicking or tapping—until the name is activated for editing.

Easily Share Pages Through Email

If you're using Mountain Lion, Safari 6 makes it simple to share content you see on the Web. Click the *Share* button to get a menu that lets you share a page you like through email or Messages, Twitter, or Facebook. (You won't see this menu if you're using Safari 6 with OS X Lion.)

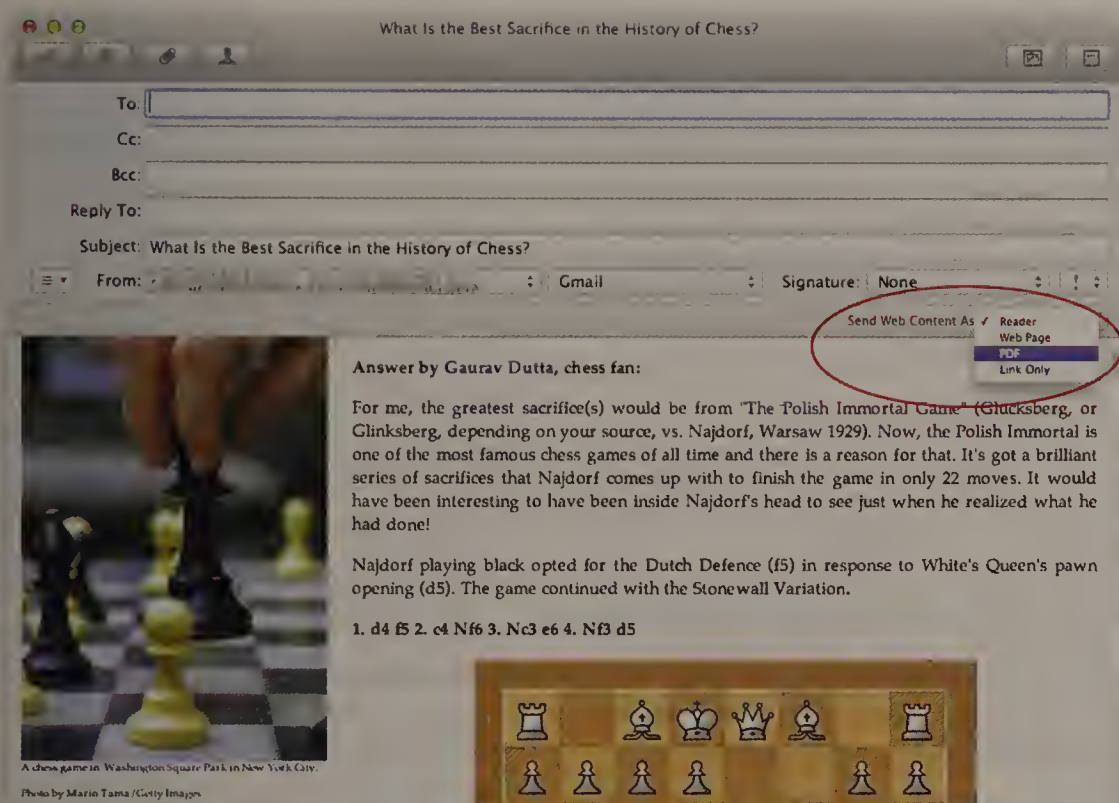
If you email webpages, you might already be familiar with the *File → Share* menu. When you use that menu, you can choose to mail the contents of a webpage or just the page's link. (If you use keyboard shortcuts, press \mathbb{A} -I or \mathbb{A} -<Shift>-I, respectively.) But no matter

In Mountain Lion, Safari 6 makes it simple to share content you see on the Web. Click the Share button in the Safari 6 toolbar to do so quickly.

step is to organize them into folders (*Bookmarks → Add Bookmark Folder*).

The next step is to organize the bookmarks *within* the folders. The easy way to accomplish that is to use the Finder to alphabetize them. Go to your

window, and then drag it from there to the sidebar. Unlike in the Finder, two folders with the same name can exist in the same location in Safari, which means that now you'll have two such folders. After placing the organized folder, delete the original.



Send a Webpage In Mail, use the *Send Web Content As* menu (circled) to choose how to send the webpage.

which method you use, you wind up in Apple's Mail, where you can change your mind about how to send the page and choose from two more options.

Once you're in Mail, look above the message area to spy the easy-to-miss Send Web Content As menu on the right. This menu lets you send the webpage itself, a link to the page, a PDF of the page, or a version that matches what you see in Safari's Reader window (View → Show Reader). The Reader version includes easy-to-read type, no ads, and multipage articles threaded together in a single document. The mail app remembers the option you choose and uses it the next time you invoke the Share command. Note that the Reader option isn't available for all webpages; but if View → Show Reader works on the page in Safari, you'll be able to send it that way, too.

Get What You Want With Modified Clicks

Safari has long allowed you to ⌘-click a link to open the linked page in a tab. (This default behavior is set up in Safari's Tabs preference pane.) Safari 6 adds two new link-clicking options: You can <Shift>-click

to send the linked page to the Reading List, or <Option>-click to download the page to your Downloads folder. But that's just basic information.

Here's the power tip: Watch the status bar at the bottom of the window (choose View → Show Status Bar if it's not there) to check what your modified click will do—there are a lot of modifier options to remember. This crib sheet is especially helpful when you add the <Shift> key to a window-opening or tab-opening click so you can toggle between having the link open in the foreground or background. If you give up on learning your modified-click behaviors even with the help of the

status-bar crib sheet, you can <Control>-click a link to see a list of options.

Reverse Your 'Never Save Password' Decision

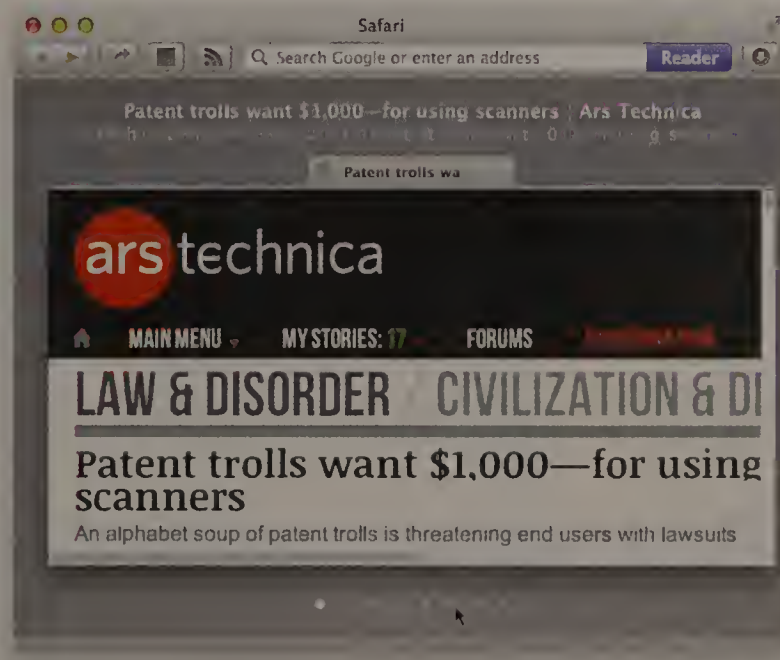
You enter a password for a webpage, Safari asks if you want to save it, and you click *Never for this Website*. But what if you have second thoughts? You can rescind your decision because, while the password wasn't saved, your "never" choice was. Choose *Safari → Preferences*, and click the *Passwords* tab. Select the site in the list (it will say 'Passwords Never Saved' in the User Name column) and click the *Remove* button. Visit the site again, and this time let Safari remember your password.

Jump to the Address/Search Field

Want to enter a URL or search string, but don't want to take your hands off the keyboard to click? You can move into the combo address/search field by using either of the keyboard commands formerly used for the separate address and search fields: ⌘-L or ⌘-Option-F.

Jump to a Tab in Tab View

When you're in Tab view (View → Show All Tabs, or ⌘-<Shift>-\)—a feature available on Mountain Lion—the row of dots under the sample window does more than indicate how many tabs are lined up. Click a dot to go directly to the tab it represents—the last one for the last tab, for instance. If you have a trackpad, you can move from one tab to another by swiping with two fingers.



Tab Jumping Click one of the dots under the window in Tab view to jump directly to a tab that isn't adjacent to the currently displayed one

Never Miss an Email With Mail's VIPs

OS X can alert you to incoming messages from your key people.

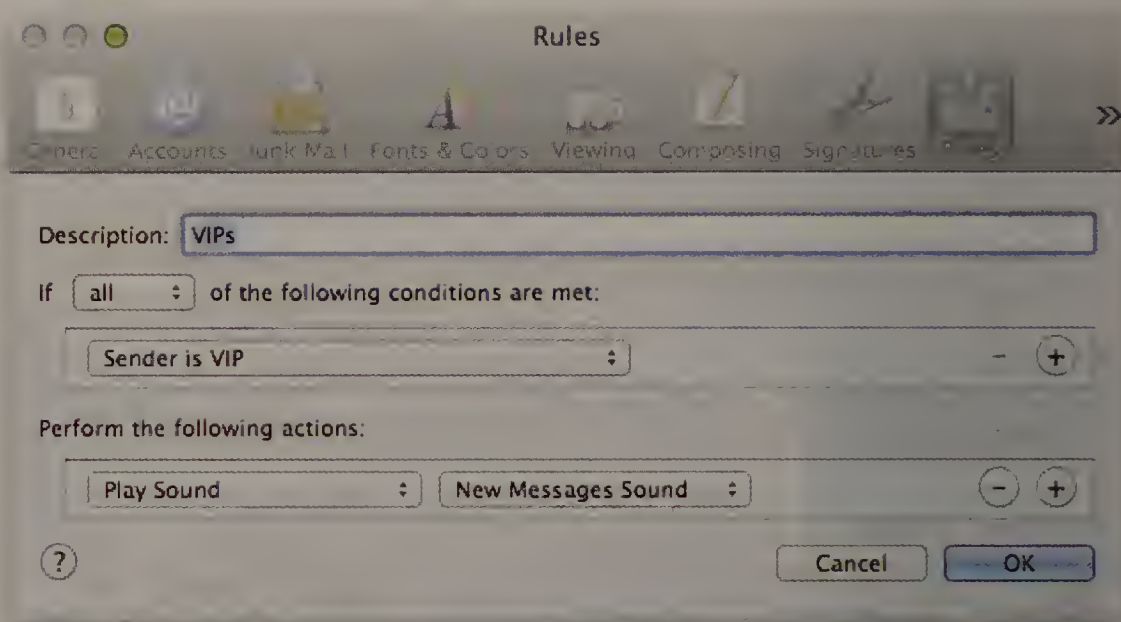
BY KIRK McELHEARN

If you get a lot of email, you know how hard it can be to spot messages from family and friends, or from your critical contacts. The recent VIP feature, added to OS X Mountain Lion and iOS 6, can alert you when you get email from your most important friends and colleagues, whether you're using your computer, an iOS device, or even iCloud mail on the Web.

Set Up VIPs

The VIPs feature works on Macs running Mountain Lion, on iOS devices running iOS 6, and on iCloud on the Web. You can create up to 100 VIPs. As long as you're signed in to your iCloud account, your VIPs will propagate across your devices. In addition, if you have a card for your VIP in Contacts and more than one email address for them, the VIP status will apply to all of the addresses. However, there is no way to create or remove VIPs from within Contacts, either in OS X or in iOS.

Add VIPs on your computer: When you get an email from someone in Mail, open the message and hover your cursor over their address; a star will appear. Click this star, and the contact will be added to your VIP list. Alternatively, you can hover over an email address, click the down arrow that



displays, and then choose *Add to VIPs*.

The first time you assign a VIP, a VIP mailbox will appear in the Mail sidebar. Click the disclosure triangle next to that mailbox to see all your VIPs listed. Click a name to see all the email messages you've received from that person.

Add VIPs on an iOS device: If you want to add someone to your VIP list on your iOS device, tap the person's name in the header of an email message to view his or her contact information. Then tap the *Add to VIP* button to add the person to the list. When you return to Mail, you'll see all your VIPs' messages in the VIP mailbox. (In iOS, the VIP mailbox displays

Alerts Made Easy Want Mail to play sounds when VIP messages arrive? Simply set up this rule in OS X's Mail.

box next to *VIP* in the pop-up window that displays.

Remove VIPs: If you want to remove someone from your VIP list, perform the above operations in reverse.

On your iPhone, for example, tap a person's name in the header of an email message to see his or her contact information, and then tap the *Remove from VIP* button. You may want to temporarily add people to your VIP list while you are working on specific projects, for

You may want to temporarily add people to your VIP list while you are working on specific projects, for example, or for a short period of time.

in Mail all the time, whether or not you have any VIPs; this is not the case in Mountain Lion.)

Add VIPs on the iCloud site: If you are checking your email on the iCloud website, you can also add people to your VIP list. Just click an email address in an incoming message, and check the

example, or for a short period of time during which you need to see their email messages as soon as they arrive.

Use the VIPs Mailbox

Clicking a name in Mail's VIP mailbox will show you all the email you have received from that VIP. Unfortunately, you won't see messages you've sent to the person, so if you want to find those, you'll have to search in your Sent mailbox.

Do you archive your mail in different folders? You can limit what you see in your VIP mailbox to only messages that

Very Important Person <vip@mcelhearn.com>

To: Kirk McElhearn

Reply-To: Very Important Person <vip@mcelhearn.com>

Very important message

Star Treatment Click the star to add a sender to your VIP list in OS X's Mail.

are still in your inboxes. Select the mailbox—either the master VIP mailbox or a particular VIP's mailbox labeled with a sender's name—and choose *View → Sort By → Inbox Only*.

You can't change the order of VIP mailboxes in Mail; they display in alphabetical order by the first name of the person. You can, however, change the name of a mailbox. Double-click it and add the name you prefer. For example, you might want to have your VIPs appear in last-name, first-name order.

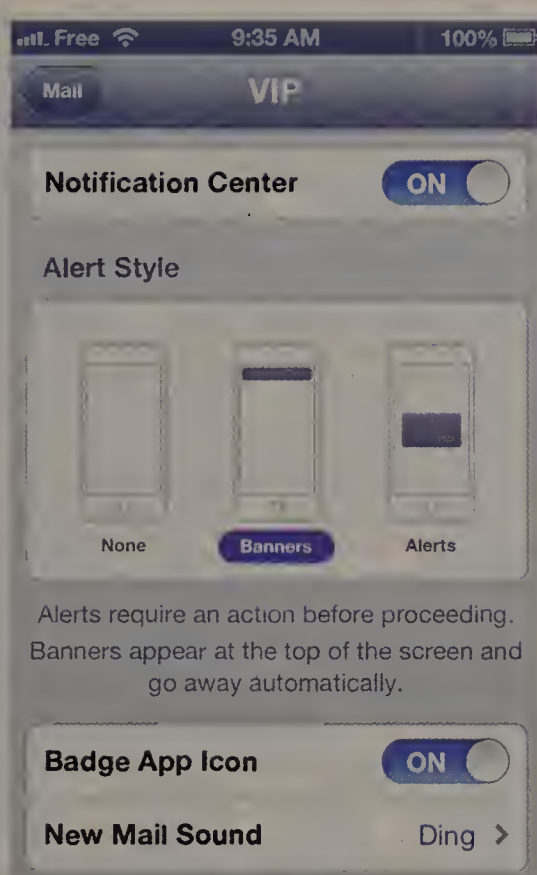
Differences in iCloud and in iOS:

The iCloud website displays the VIP mailbox much the way OS X does; each sender has their own VIP mailbox, and if you click one, you'll see all of that person's messages. Things work differently with iOS: All your VIPs' messages appear together in one VIPs mailbox in Mail. Messages are sorted in reverse chronological order (the newest email at the top). iOS Mail offers no sort options, so you can't change this.

Get Notified

One of the best things about VIPs is that Mail can notify you when you receive email messages from them.

Get notifications in iOS: In iOS, go to *Settings → Notifications → Mail*. You'll see a VIP section; tap that. In that area, choose to have email from your VIPs show up in the Notification Center; you



On-the-Go Notifications Set notifications in Mail in iOS so that your VIPs' messages trigger alerts or play sounds.

can elect to get banners or alerts, see badges on the Mail app icon, and even have your iOS device play sounds when such messages arrive.

Mail in iOS treats VIPs separately from other contacts. Even if you already have alerts and sounds for regular mail, you can designate different alerts, and choose a special sound, for VIP email.

Add a rule in OS X: In OS X, it's easy to set up a rule in Mail to perform certain actions when VIP email arrives. Go to *Mail → Preferences* and click *Rules*. Click the *Add Rule* button. For the first condition, choose *Sender is VIP*. In the 'Perform the following actions' section, you can choose to have certain actions occur. For example, I have my VIPs' messages trigger the New Messages Sound so that I can tell when I get messages from them. (Note that Mail rules are duplicated on other Macs that use the same iCloud account, so if you set up a rule on your desktop Mac, the same rule will apply on your laptop.)

Add VIP notifications in OS X:

Another way to get notified when VIP messages come in is to use a Mail preference and OS X's Notifications. First, launch System Preferences and click *Notifications*. Click *Mail* in the list, make sure it's listed as *In Notification Center*, and then choose either *Banners* or *Alerts*.

Next, in Mail's preferences, click the *General* tab. If you want to be notified only about messages from VIPs (instead of about each email you get), set the 'New message notifications' pop-up menu to *VIPs*.

The VIP feature offers a great way to make email from your most important contacts stand out. Use the label either permanently for your family and friends, or temporarily when you're working on a project, and you'll be able to spot your most important email at a glance.

Lively Up Leather Scout Pack

The House of Marley's \$200 Lively Up Leather Scout Pack (www.thehouseofmarley.com) is a good-looking, eco-friendly laptop bag that adjusts to fit all sorts of goodies—including a full-size iPad and a 15-inch MacBook Pro. The Scout Pack is a standard backpack made from the company's weather-resistant Rewind fabric, which is a blend of recycled hemp, recycled organic cotton, and RPET (fabric spun from recycled pieces of plastic water bottles). One particularly useful feature of the pack is its adjustability. Metal hooks and loops secure the compartment flaps, which means that if you're using the pack for just, say, an iPad and a few other items, you can use loops farther down the bag to make the bag more compact and to keep its contents secure. The Scout Pack is cleverly designed, but, due to the stiff fabric, I found working the metal hooks and button closures difficult. Also, none of the compartments are designed for easy access, which is great for security but annoying when you're trying to answer a phone call. This bag isn't the best option for daily use, but as a travel pack—or when you don't need fast access to your items—the Lively Up Leather Scout Pack is a fashionable choice.—LEAH YAMSHON





Three Ways to Vanquish Technology Vices

Start afresh this spring with good computing habits.

BY KIRK McELHEARN

Springtime has arrived. You've cleaned your house; now how about cleaning up your act with your technology too? Here are a few ways to kick some bad computing habits.

1: Stop Littering Your Desktop

Your computer desktop is a convenient place to store files, because you can see them easily and get to them fast. But it can get messy, just as a real desk surface can.

The first step in cleaning up these files is to sort them. Right-click (or <Control>-click) the desktop, choose *Sort By* from the contextual menu that appears, and choose a sort criterion.

I recommend sorting first by *Date Modified*, to find files you've left unchanged for an especially long time. Shunt these off to a folder elsewhere, and give the folder a name such as **Desktop Clutter**. Then look for specific types of files that you might want to park in your archives. Candidates may include Word files you use for work, photos that people have sent you, and PDF files that you downloaded to read.

A Typical Desktop Does your desktop look like this? If it does—and the result is that you can't find what you need—straighten things up by sorting your files into subfolders.

You may want to arrange the remaining files on your desktop by date modified, or by name, so that you can find them more easily. After you've cleaned up your desktop, you can follow the same drill with your Downloads folder.

2: Stop Using the Same Password

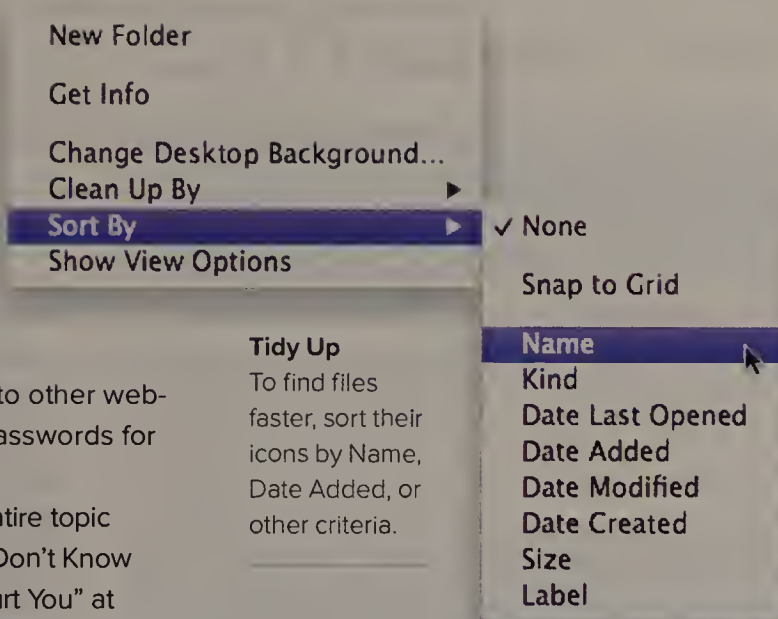
One of the riskiest computing vices is to use a password for multiple purposes. If you use the same password for, say, your

With your email password in hand, a bad guy can send password-reset requests to other websites and establish new passwords for your accounts.

Gmail account, your Facebook account, and your bank's website, a crook who figures it out can easily steal your identity. And with your email password in hand, a bad guy can send password-reset requests to other websites and establish new passwords for your accounts there, too.

Password safety is an entire topic unto itself (see "What You Don't Know About Passwords Might Hurt You" at go.macworld.com/passwords), but I can boil the idea down to a couple of basic guidelines. First, distinguish between websites that need a secure password and ones that don't. Your email account, bank site, and any site with your personal data (such as Facebook) are critical accounts, and require the most secure passwords. Second, learn to create strong passwords, and use a password manager so that you don't have to remember them, such as AgileBits' \$40 1Password (🔑🔑🔑🔑; go.macworld.com/1pass). But at a site that you log on to simply to play games, post comments, or participate in forums, for instance, you can get by with using a simpler password. Try to come up with a password that isn't obvious but that you can remember easily.

Even if you have a password manager, however, you may need to enter some passwords manually. With an iTunes account, for example, you must enter your Apple ID manually—and you may



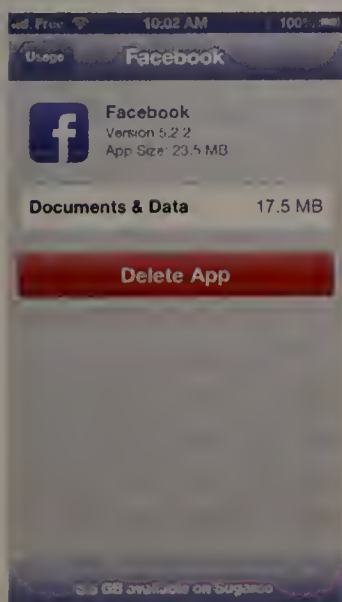
need to do so often, such as whenever you buy music or movies, or when you purchase apps on an iPhone. So create a strong password that you can remember. Use something long—12 characters or more—that, for example, includes two words and some digits, as well as one or two capital letters. You might use a name, a word, and a memorable series of digits, such as this: **j0Hn296W1ndow**.

3: Clean Up Your iPhone

Even if you love smartphone apps, don't make yourself swipe through screen after screen of apps you never use. These unused apps can clutter up your phone and occupy valuable space. It's easy to remove them, and cleaning out your phone at least once a year allows you to start afresh.

On an iPhone, you have two options for cleaning house. The first is to tap and hold an app until its icon wiggles, and then tap the X in the icon's upper-left corner. Once all of your apps are wiggling, you can delete any of them by tapping the X icon. When you're finished, press the *Home* button to stop the wiggling.

The second way to remove iPhone apps has the advantage of letting you see how much space each one takes up on your iPhone. To start, go to *Settings* → *General* → *Usage*. In the Storage section, scroll down a bit and tap *Show All Apps*. You'll see a list of all the apps on your iPhone, and how much space they and their files consume. To eliminate an app, tap its name, and then tap *Delete App*.



Delete That App? Before you delete an iPhone app, you can check in Settings to see how much space it's hogging.

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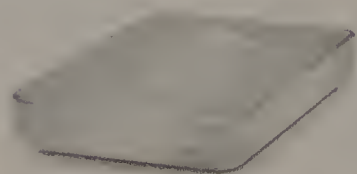
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Reviews

Hardware and Software for All Your Business Needs



Hardware

G-Drive Mobile

★★★★; \$180; G-Technology;
www.g-technology.com

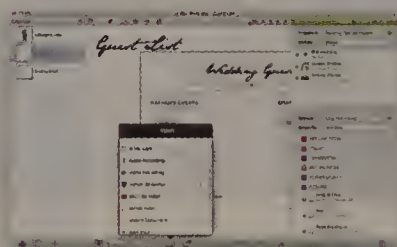
G-Technology's G-Drive Mobile is a portable, bus-powered external hard drive designed to complement your Apple laptop. It has an attractive aluminum case, a three-year warranty, and USB 3.0 and FireWire 800 connectivity. The drive comes formatted as HFS+, so it's ready to use right out of the box with Macs new and old.

In Macworld Lab tests, the drive posted a write speed of 58.4 megabytes per second and a read speed of 76 MBps over FireWire 800 in the AJA System Test. Via USB 3.0, the G-Drive Mobile posted a write speed of 95.9 MBps and a read speed of 97.3 MBps. Overall, the drive's middling speeds are comparable to those of WD's My Passport Studio and Seagate's Backup Plus, each of which costs less than the G-Drive Mobile.

With every new Mac release, FireWire becomes increasingly obsolete. Although the MacBook Air, new iMacs, and Retina MacBook Pros have USB 3.0 ports, you need an adapter to attach one of those computers to the G-Drive Mobile's FireWire connection.

For users who want to add external storage capacity, this

drive will suffice, but if you need high performance, look for an external drive with Thunderbolt or RAID 0, or opt for a solid-state drive. You can find drives that are faster, more affordable, more secure, and offer more storage. But if you like the design, are happy with its 1TB capacity, and are reassured by the three-year warranty, the G-Drive Mobile is a capable bus-powered external drive.—KEÁN BARTELMAN



Software

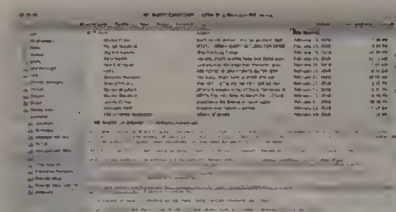
Curio 8

★★★★; \$100; Zengobi; www.zengobi.com

Equal parts project manager, vector-graphics engine, digital notebook, and slide deck, Zengobi's Curio 8 is an ideal tool for managing a complex project. Though it's pricier than many rival programs, it packs potent new features within a nicely refreshed, iOS-inspired interface and is rebuilt for Lion and Mountain Lion. For a single price, you can now use all of the program's features.

Files from older versions migrate seamlessly into the new version, though Curio 8 uses a different file type that previous versions can't read. You can now add YouTube and Vimeo videos, or record your own audio and video with the

Mac's built-in tools (video playback now works flawlessly). You can also link a project to your Calendar and Reminders, even if they reside in iCloud. I have yet to review a better, friendlier, or more powerful tool for taking on any project under the sun.—NATHAN ALDERMAN



MailMate 1.5

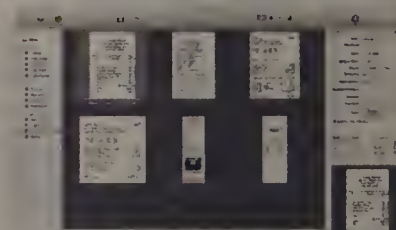
★★★★; \$30; Freron; freron.com

MailMate is a spartan but powerful email client whose mission is to help serious email jockeys tame the chaos of their various IMAP email accounts, which it imports with no fuss. Once MailMate imports your accounts, you can use the program's extremely powerful search and filter functions to cut through the clutter and find what you need. You can drill down to the different components of the To, From, and Cc fields—just the address, or the name, or one of the embedded headers, for example. You can search subject lines by their prefix, or by a specific word. In addition, you can flag messages by their level of server domain. Smart mailboxes help you filter messages according to whether they contain images, include PDFs, or are HTML-only. On top of that, to help you trawl through all the

messages, MailMate offers an extensive set of customizable keyboard shortcuts.

Though MailMate deals mainly in plain text, it can display basic HTML messages that are sent to you, and it can show attached images in the body of a message. To send HTML messages, you must create them in the Markdown formatting language.

MailMate never crashed or gave me trouble during my tests. It packs way more power than the average user will ever need, but if you live and die by email, it may be a godsend.—NATHAN ALDERMAN



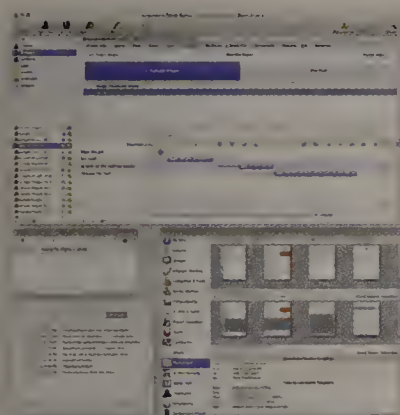
Paperless 2.2.1

★★★★; \$50; Mariner Software;
www.marinersoftware.com

Mariner Software's Paperless 2.2.1 couples with a Fujitsu ScanSnap or with an Image Capture-compatible document scanner to digitize your paper files (TWAIN devices are not supported). The program processes scanned files via OCR to create a searchable archive. It then parses the files to fill in the documents' metadata with information such as dates and dollar amounts.

Paperless offers two flavors of custom collections. The standard one is a folder that holds items you drag into it.

With smart collections, you specify search criteria, and Paperless fills the folder with matching items. Frustratingly, a smart collection can't match on OCR text despite the fact that Paperless's search bar includes results from that text. This is a big missed opportunity. Download the free demo and see if Paperless hits the spot for you.—STUART GRIPMAN



Studiometry 10

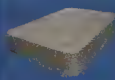
★★★★; \$200; Oranged Software;
www.oranged.net

Studiometry 10, a business-management application aimed at small businesses of 1 to 50 employees, is designed to help you track and manage projects, create quotes and invoices, and make sure you're getting paid on time. The program grows as your business does, making it easy to convert a stand-alone database into a server-based business-management tool that can handle users whether they work on a Mac, a PC, or an iOS device. The setup is relatively simple. You can choose from a small selection of templates, so you don't have to create your quote, invoice, and report templates from scratch. Studiometry offers a full range of features, including Gantt charting and time tracking, and it syncs with Oranged's Accountant accounting package.—JEFFERY BATTERSBY

Top Products


YOUR GUIDE TO THE BEST
HARDWARE WE'VE TESTED

 HARD DRIVES Desktop				
PRODUCT	RATING	PRICE ¹	TYPE	MORE INFO
G-RAID With Thunderbolt www.g-technology.com	★★★★	\$713 (8TB)	Quad interface	go.macworld.com/raid
LaCie d2 Quadra USB 3.0 (pictured) www.lacie.com	★★★★½	\$300 (2TB)	USB 3.0	go.macworld.com/lacie
My Book VelociRaptor Duo www.wdc.com	★★★★	\$850 (2TB)	Thunderbolt	go.macworld.com/velociraptor

 HARD DRIVES Portable				
PRODUCT	RATING	PRICE ¹	TYPE	MORE INFO
ioSafe Rugged Portable SSD (pictured) www.iosafe.com	★★★★½	\$500 (120GB)	Single interface	go.macworld.com/iosafe
LaCie Rugged USB3 Thunderbolt SSD www.lacie.com	★★★★½	\$200 (120GB)	Dual interface	go.macworld.com/thunderbolt
My Passport Essential www.wdc.com	★★★★	\$110 (500GB)	Dual interface	go.macworld.com/mypassport

 INPUT DEVICES Keyboards, Mice, and More				
PRODUCT	RATING	PRICE ¹	TYPE	MORE INFO
Intuos5 Pen Tablet intuos.wacom.com	★★★★½	\$178	Pen tablet	go.macworld.com/intuos5
Magic Trackpad www.apple.com	★★★★	\$69	Trackpad	go.macworld.com/trackpad
Wireless Solar Keyboard K760 (pictured) www.logitech.com	★★★★	\$61	Keyboard	go.macworld.com/k760

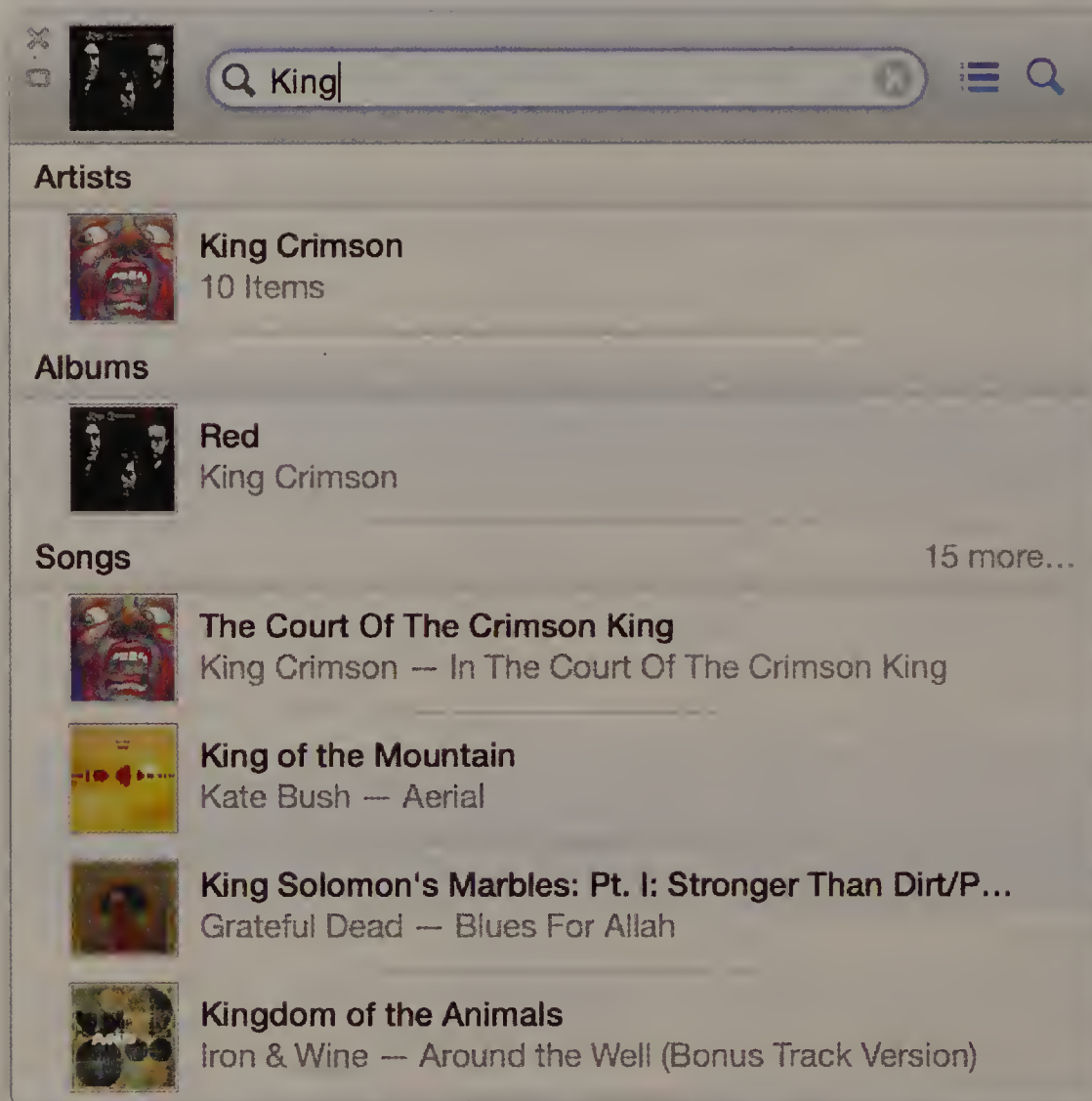
 PRINTERS Laser and Inkjet				
PRODUCT	RATING	PRICE ¹	TYPE	MORE INFO
5130cdn (pictured) www.dell.com	★★★★½	\$1516	Color laser	go.macworld.com/5130cdn
Officejet Pro X576dw www.hp.com	★★★★	\$799	Color inkjet	go.macworld.com/ojx576dw
WorkForce Pro WP-4590 www.epson.com	★★★★	\$418	Color inkjet	go.macworld.com/workforce

 PRINTERS Multifunction				
PRODUCT	RATING	PRICE ¹	TYPE	MORE INFO
Business Smart MFC-J4510DW www.brother-usa.com	★★★★½	\$200	Inkjet	go.macworld.com/brotherj4510dw
OfficeEdge Pro5500 (pictured) www.lexmark.com	★★★★	\$352	Inkjet	go.macworld.com/pro5500
WorkForce WF-3540 All-In-One www.epson.com	★★★★	\$200	Inkjet	go.macworld.com/wf3540

¹ All prices are the best current prices taken from a PriceGrabber survey of retailers at press time.

Playlist

Everything You Need to Know About iPods, iTunes, and Mac-Based Entertainment



Organized Search

Your results display sorted by type.

If you want to use the MiniPlayer a lot, you can close the iTunes window (⌘-W)

and set a preference that makes the MiniPlayer float above all your other windows. Choose *iTunes* → *Preferences* → *Advanced*, and then check *Keep MiniPlayer window on top of all other windows*. (If you want to use the MiniPlayer with iTunes in full-screen mode, or if you use multiple spaces, see the hint at go.macworld.com/miniplayerfull.)

So what can you do with the MiniPlayer? You can access a number of controls if you hover your pointer over the MiniPlayer window. From left to right, its controls are as follows:

- > The first controls you'll see are an X and, below it, a rectangular button. The X closes the MiniPlayer, while the rectangular button expands the MiniPlayer back to the full iTunes interface.

- > Clicking the > button (which appears in the MiniPlayer while music is playing) yields a contextual menu that allows you to rate the currently playing song, add it to the bottom of the Up Next queue, move it to the top of that queue, add it to an iOS device or to a playlist, or go to the song in your iTunes library or in the iTunes Store.

- > The playback controls consist of Previous, Play/Pause, and Next.

- > The AirPlay icon leads to a contextual menu that allows you to do two things. First, you can use the menu's volume slider to change iTunes' volume. Second, you can elect to stream your music to one or more AirPlay devices.

- > The second-to-last icon gives you access to the Up Next queue. You can move songs around in the queue, remove them from the queue, or play songs that you've listened to recently.

In Depth: iTunes MiniPlayer

We dive into what's new and changed in the latest incarnation.

BY KIRK McELHEARN

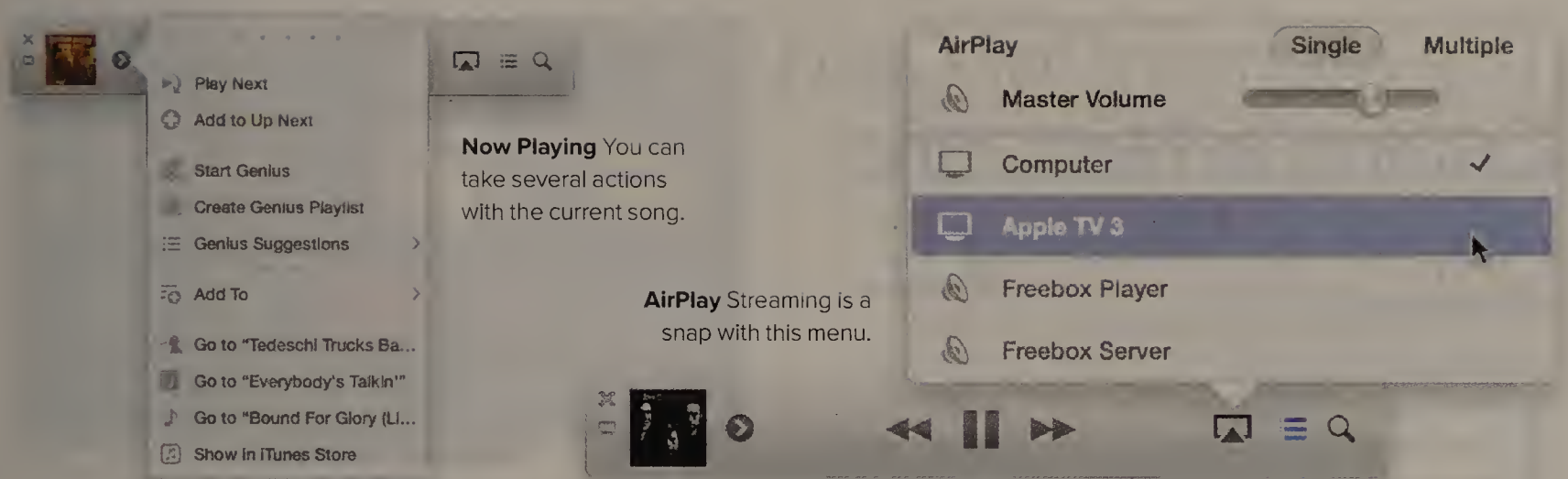
The iTunes MiniPlayer has been around for years, but Apple has enhanced its functionality in iTunes 11. In addition to being a control center for playing your music, it can help you search for songs, playlists, and more, and it gives you access to the Up Next queue. Here's how to get the most out of the new iTunes MiniPlayer.

A Mini Window

If you want to use the MiniPlayer, you need to display it. In iTunes 11, choose *Window* → *MiniPlayer*, or simply press

⌘-<Option>-3; this action will bring up the MiniPlayer as well as the main iTunes interface. If you want to use just the MiniPlayer, click the rectangular button at the upper-right corner of the main iTunes window (to the left of the control to enter full screen), and select *Window* → *Switch to MiniPlayer* or press ⌘-<Option>-M.

In addition to being a control center for playing your music, the MiniPlayer can search for songs, playlists, and more, and it gives access to the Up Next queue.



> Finally, the Search button lets you search your iTunes library, finding content that you may want to play right now or to add to the Up Next queue.

Using AirPlay: If you click the AirPlay icon, the resulting menu will show any AirPlay devices you have, as well as a general volume slider. In the screenshot of the AirPlay menu above, you'll notice that Computer is currently checked; if I wanted to send the audio to my Apple TV, I would just need to click its line in this menu. You can send the audio to multiple devices, as well—just click the *Multiple* button, and then check the devices you want to use. The Master Volume slider adjusts iTunes' volume; if you choose to

stream to multiple devices, each of them will have its own volume slider too.

Using Up Next: The MiniPlayer also connects to your Up Next queue; clicking the Up Next icon displays the queue. You can see what's going to play soon, along with the songs you've recently played (click the clock icon); and you can drag tracks, delete them, and more. Check out our extensive review of iTunes 11 at go.macworld.com/itunes11 to find out more about what you can do with Up Next.

Searching: If you click the magnifying glass icon, a search field appears on the MiniPlayer. Enter one or more words, and you can search your Music library from the MiniPlayer (by contrast, the search box in the main iTunes window lets you search your entire iTunes library). Results display quickly in a menu below the MiniPlayer. Here you can see artists, albums, and songs, but also play-lists. The screenshot on the previous page, for example, shows results from my library; only one artist's name contains the word *king*, but a lot of song names contain the term as well. Four items display in each section of the menu at maximum. To see all of the songs in one long list, click *more...*

From this list, you can hover the mouse pointer over an item and click the > icon to display a contextual menu to add that item to Up Next, play it next, or perform any of several other operations. If you double-click an item, it will start playing.

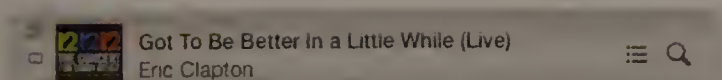
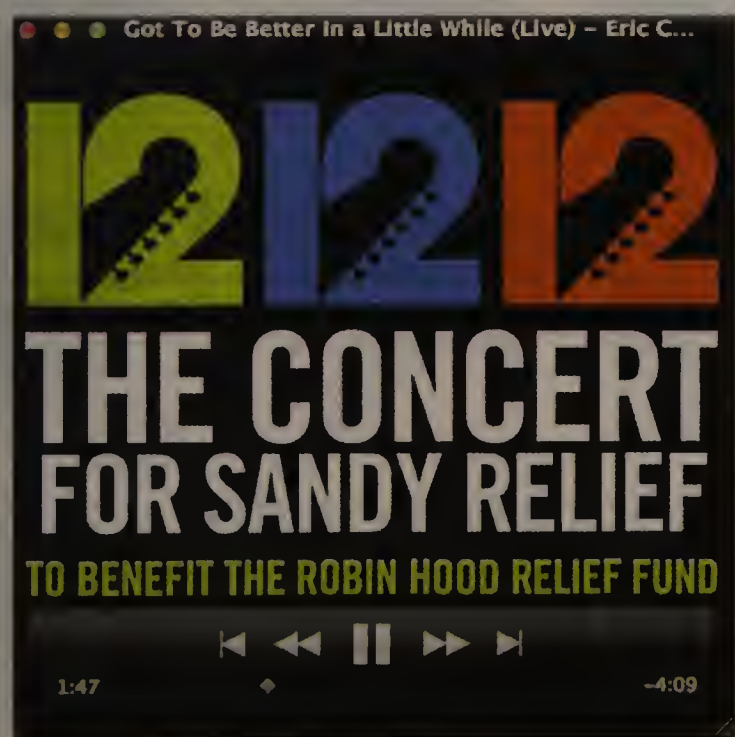
What's Missing?

The MiniPlayer lacks one important thing: a progress bar. The previous version of this tool had one, and you could use it to see where you were in a track, and skip ahead or back. You might not need this feature as often for music, but I always found it particularly useful for podcasts.

You can, however, get similar functionality by clicking the album artwork at the left of the MiniPlayer window. This action displays the Artwork Player; hover your mouse over this floating window to see controls and a progress bar.

The Artwork Player also offers other controls, but they're more readily accessible from the MiniPlayer. Nothing prevents you from displaying both windows, as long as you have enough screen space. In case you want to use the Artwork Player and keep it above other windows, iTunes' Advanced preferences pane has a *Keep movie window on top of all other windows* setting; select that option to ensure that the Artwork Player is visible at all times.

The MiniPlayer is a great tool for controlling iTunes, managing what you're listening to, and quickly searching for music. If you get accustomed to it, you may find yourself controlling much of your listening from this small window instead of visiting the main iTunes interface.



Artwork Player This window shows several controls and a progress bar.

The Moment for Cord Cutting Is Now, and Apple Is Missing It

BY JOEL MATHIS

I knew that cord cutting's time had come when I visited my wife's parents in Arkansas recently. My father-in-law has a giant flat-screen HDTV hooked to a killer stereo system, making his home theater feel much like an actual theater. On this visit, however, his cable box was gone: It had been supplanted by a Roku, and the cable service replaced by Amazon Prime, Hulu Plus, and Netflix. That works out to a savings of at least \$30 a month—well worth it, my father-in-law says, even though he can't watch CBS shows or live golf anymore.

It's one thing when people in their twenties and thirties leave cable behind—my wife and I cut the cord after Hulu debuted and while Netflix's streaming service was loaded with second-tier movies from the 1970s. It's another thing when you lose people in their fifties and sixties. The newspaper industry owes its continued survival (such as it is) to older readers who have stuck with habits formed in their youth; the cable industry might not be able to rely on baby boomers to the same degree.



Limited Lineup Despite recently becoming an area of "intense interest," Apple TV has yet to fulfill its potential and broaden its offerings.

And here's a shocker: Apple—which has anticipated this very moment for so long—still doesn't seem quite ready for it.

Yes, the Apple TV has been around since 2006. And yes, Apple CEO Tim

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Cook recently upgraded its role from a “hobby” product to an area of “intense interest.” But the truth is, it still doesn’t feel like there’s much *there* there.

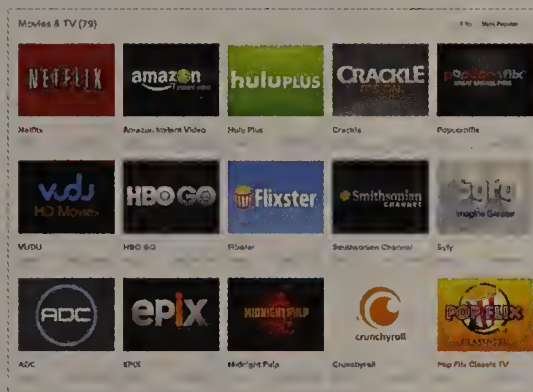
Cost is a big reason viewers cut the cord. Viewers have long fantasized about an à la carte version of cable that would let them subscribe to, say, ESPN without having to pay for Lifetime too. The closest thing to that? Online services like Hulu Plus and Netflix—which not only let you choose when to watch, but also effectively let you control the range of content.

And Roku seems far better positioned than Apple to offer a variety of choices. What’s more, Roku seems to be more interested in continually expanding its selection. In January, Roku announced a deal with Time Warner Cable that will let the cable company’s subscribers stream up to 300 live channels through the Roku box. Roku also added several new channels—including Fox Now, PBS, and PBS Kids—to its 700-channel lineup.

The last big content news for the Apple TV came in July 2012, when Apple added Hulu Plus to its much more limited lineup. And the Apple TV can’t stream content from Amazon Instant Video, HBO Go, or numerous other services that Roku offers.

Between a Roku and a Hard Place

The message is clear: If you want the service that’s more adept at providing assorted viewing options, you go with



Wide Variety Thanks to recent deals, Roku now offers more than 700 viewing options.

Roku. If you want the company that looks for all the world like it’s working to bring you the best variety of viewing options a year from now, you go with...Roku. As for Apple TV? Well, it doesn’t seem nearly as lame as Google TV, but that assessment may depend on your point of view.

This isn’t all Apple’s fault. The company is still wading through the weeds of legacy media companies that don’t want to change to meet the expectations of 21st-century viewers. And maybe we’re spoiled: We saw Apple getting its way in music, and expected more of the same elsewhere. Things might change if Apple were suddenly to sign a few deals with video providers and start competing.

The problem is that another company is already meeting viewer expectations, and doing it to such an extent that even my in-laws are ready to make the leap. For the first time in a decade, Apple isn’t leading the way. Who can blame viewers who make the Roku choice?

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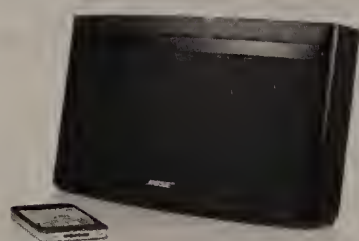
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Reviews

Home Entertainment Hardware, Software, and Accessories



Hardware

Bose SoundLink Air

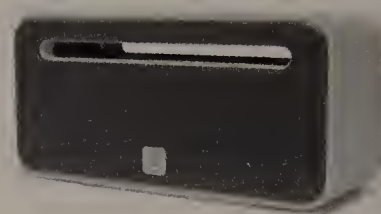
★★★★½; \$350; Bose; bose.com

The SoundLink Air Digital Music System, an AirPlay version of Bose's SoundDock speaker docks, is a somewhat portable speaker system. It can run on a battery, but doesn't include one—Bose's rechargeable lithium-ion battery is a \$90 option.

Once the SoundLink Air is on your wireless network, you can send audio to it from any compatible AirPlay device.

When you do, you'll hear satisfying, room-filling sound. The SoundLink seems tuned to boost bass levels relative to other frequencies; if you like a little extra kick, you'll enjoy the effect. The overall sound is otherwise crisp and clean. I did notice a bit of low-end distortion at peak volumes on bass-heavy music, but dialing down the volume a smidgen alleviated that distortion.

The SoundLink Air is easy to configure and sounds good in general use. I'm disappointed that the rechargeable battery isn't included. But if you prefer your music to be a little bass-heavy and won't need the peak volume the speaker offers, the SoundLink Air is a fine AirPlay speaker to consider.—LEX FRIEDMAN



Westinghouse Unplug

★★★★; \$100; Westinghouse; westinghousedigital.com

The Unplug Wireless Bluetooth Sound System UM100 (available in black, white, or gray) is a portable, rechargeable speaker that streams audio from your phone, tablet, or computer over Bluetooth.

A short, wide vent in the face maximizes the effect of what Westinghouse calls the Unplug's "ultra bass booster passive radiator subwoofer." Obviously, the Unplug is too small to house a true subwoofer; in reality, the design aims to coax whatever bass presence is possible from a unit of this size. The Unplug also employs a pair of 3-watt, 40mm, full-range drivers.

At normal and reasonably loud volumes, it offers pretty good performance across the frequency range. But even at its best, it sounds a bit small. Still, it fares well next to the popular Jambox speaker: The Unplug can get significantly louder than the Jambox, and its bass presence, at least at louder volumes, outshines that of the Jambox.

The Unplug works acceptably as a speakerphone. Callers said the quality was passable, and I could hear them loud and clear. You can

answer calls from the speaker, but you can't initiate calls (or trigger Siri) from it.

As an affordable, portable, rechargeable speaker, the Unplug has plenty of things going for it.—LEX FRIEDMAN



Scosche RH656

★★★★; \$130; Scosche; scosche.com






Near the top of Scosche's audio lineup is the RH656 On Ear Headphones with TapLine Remote & Mic, a handsome, full-size, on-ear headphone, available in black or white.

The RH656's grip on the head is firm. One big comfort issue, though, is the headband, whose underside has two parallel ridges.

The first time you crank up the volume, the big sound will impress you. But what at first seems like real bass is mostly a healthy boost of midbass frequencies; the lowest octave gives the RH656 trouble, resulting in audible distortion.

Like several similar headphones, the RH656 offers a full, exciting sound that emphasizes a "fun" experience. If you value sonic accuracy or a brighter sound signature, you can find better choices.—TONY SILVA

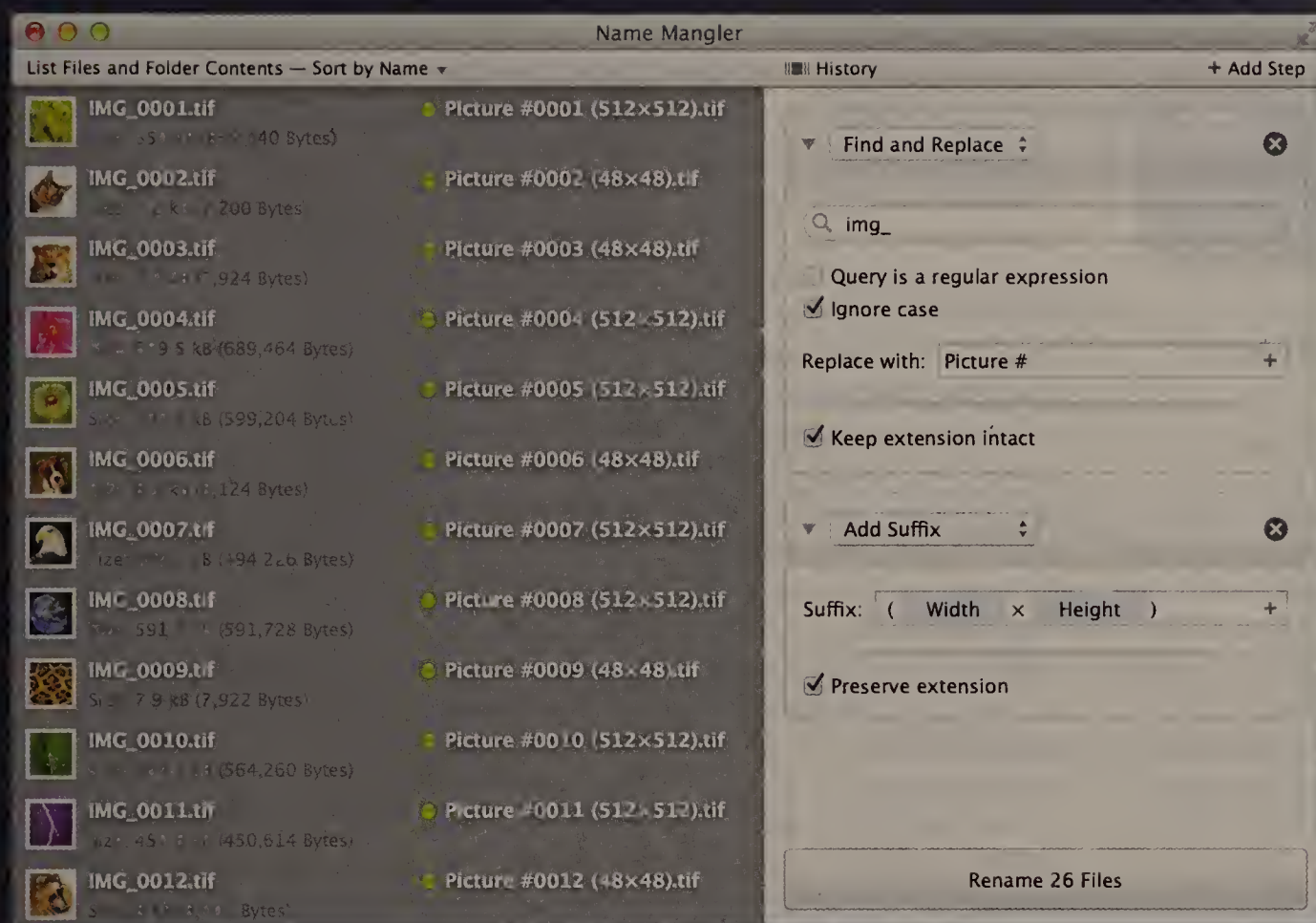
iPods: Current Lineup

PRODUCT	SPECS	RATING	PRICE¹	DISPLAY	MORE INFO
iPod Classic 	160GB	★★★★	\$249	2.5-inch color	go.macworld.com/classic2
iPod Touch 4th Generation 	16GB	n/a	\$199	3.5-inch color (Retina)	go.macworld.com/touch4
	32GB	★★★★½	\$249	3.5-inch color (Retina)	go.macworld.com/touch4
iPod Touch 5th Generation 	32GB	★★★★½	\$299	4-inch color (Retina)	go.macworld.com/touch5
	64GB	★★★★½	\$399	4-inch color (Retina)	go.macworld.com/touch5
iPod Nano 	16GB	★★★★	\$149	2.5-inch color	go.macworld.com/nano7
iPod Shuffle 	2GB	★★★★	\$49	None	go.macworld.com/shuffle4

n/a = not available. ¹All prices are Apple's prices.

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Logitech UE Smart Radio

★★★; \$180; Logitech; logitech.com

A music streamer, alarm clock, and speaker wrapped up in a compact, nightstand-friendly package, the Logitech UE Smart Radio is essentially an updated version of the company's Squeezebox Radio (★★★; go.macworld.com/squeezebox), with the same 0.75-inch tweeter and 3-inch driver.

The unit's sound quality is not outstanding, but it's pretty good if you take the device's size and shape into consideration. It's loud enough for a small room. As before, the Smart Radio supports a long list of streaming-audio services. You can also stream music from your Mac or Windows PC in a range of formats.

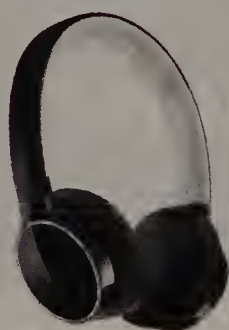
One big difference is that the Smart Radio includes a rechargeable battery (with up to 6 hours on a charge, according to Logitech). That's quite a useful feature for a streaming-music player that otherwise requires no wires (it features 802.11g Wi-Fi).

The mobile app, Logitech UE Smart Radio Controller (for iOS, Android, or Kindle Fire), is both attractive and intuitive—which is great, since using the Smart Radio's physical buttons and click-and-scroll wheel is unpleasant. It's a shame that the pretty new iOS app isn't designed to run natively on an iPad and isn't

always responsive.

Also on the negative side, I couldn't get the new UE Music Library server software to properly scan my Mac mini's entire iTunes library or to present my playlists on the Smart Radio, though installing the new server on my iMac (with its not-quite-so-large library) worked fine. The server software has some rough edges too, such as no visual indication when you clear the cache folder or delete preferences. Finally, the new server, online accounts, and mobile apps aren't compatible with the older Squeezebox.

The Logitech UE Smart Radio is a capable streamer. What holds it back is the sometimes flaky desktop and mobile software.—JONATHAN SEFF



Philips SHB9100

★★★; \$130; Philips; usa.philips.com

Philips's SHB9100 Bluetooth stereo headset offers some compelling features. First, although it's a lightweight, on-ear headset, the earpads are large enough to cover most ears. These comfortable, soft cushions also offer good passive noise isolation; during a recent plane trip, I found the noise isolation sufficient while I watched a movie on my iPad.

A second cushion behind each main one allows the earpads to pivot slightly for the particular angles of your ears and head. The design

improves fit, and while the earpad material can make your ears warm, it's easy to forget the earpads' presence. The grip is fairly tight, but you won't want to wear the SHB9100 while running.

Once you've "broken in" the SHB9100 with a few hours of listening, the audio quality is quite good. While the bass performance isn't anywhere near that of a good set of wired, full-size headphones, I didn't feel that I was missing much (compared to my expectations for portable headphones). Audio is clear and balanced, with good midrange and treble, plus very good stereo imaging. The highest frequencies can be a bit fuzzy, but most music I tested the SHB9100 with didn't exhibit this issue.

The SHB9100 runs on a battery that you recharge with a USB-to-Mini-USB cable (included). Philips claims that the battery should last for 9 hours of use. Using the SHB9100 for about 2 hours a day, I got through several days without the battery waning. The SHB9100 also comes with a standard headphone cable, which you can use if the batteries run out—a nice touch.

My only complaint is that the audio quality on phone calls was disappointing. I could hear callers just fine, but they had trouble hearing me, even when I held my hand up in an attempt to channel my voice toward the microphone in the right earpiece.

Getting both comfort and good sound isn't easy with Bluetooth headphones, but Philips's SHB9100 offers a nice balance between the two.—KIRK McELHEARN



BodyMedia Fit Core

★★★; \$120; BodyMedia; bodymedia.com

The Fit Core fitness tracker is a lightweight band that fits neatly around your upper arm. Its biggest strength is its ability to accurately track calories burned: Thanks to its sensors, it tracks not just your activity but also your body's reaction. It also monitors steps taken and sleep duration.

Unfortunately, it has some major drawbacks. Because the Core does not display any information itself, you need to pay \$7 a month to subscribe to the BodyMedia Fit Activity Tracker service. (When you buy the Core, you get three months of Activity Tracker for free.) You can opt to buy a \$69 display, which syncs with the Core and gives you a quick view of your progress, but you'll still need to pay for Activity Tracker if you want to see overall charts and trends.

Activity Tracker and the Core also work with the BodyMedia Fit mobile app. But since the Core lacks built-in Bluetooth, the app lets you see your daily numbers only after you have synced your mobile device with the server by plugging it into your computer via Micro-USB—which defeats the purpose of having a mobile app.

If you're watching your weight, the Core is an accurate calorie monitor. But the Activity Tracker subscription adds to the price—and without it, the device is basically useless.


—SARAH JACOBSSON PUREWAL

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Hot Stuff

What We're Raving About This Month

Motorheadphones

If you've ever asked yourself WWLLT (What Would Lemmy Listen To?), now you finally have your answer. Lemmy Kilmister, the frontman of the band Motorhead, was on hand at the CES 2013 trade show to introduce the new Motorheadphones line, which includes five headphones and earphones designed to bring out the midrange tones that other headphones sacrifice in the name of bass. The metal-themed (as in heavy metal) headphone designs come with features you'd expect—some with in-line mics and controls for use with mobile devices, others with turntable ear cups for DJs—but all are made to provide clear mids along with warm lows and well-defined highs (www.motorheadphones.com).—JONATHAN SEFF



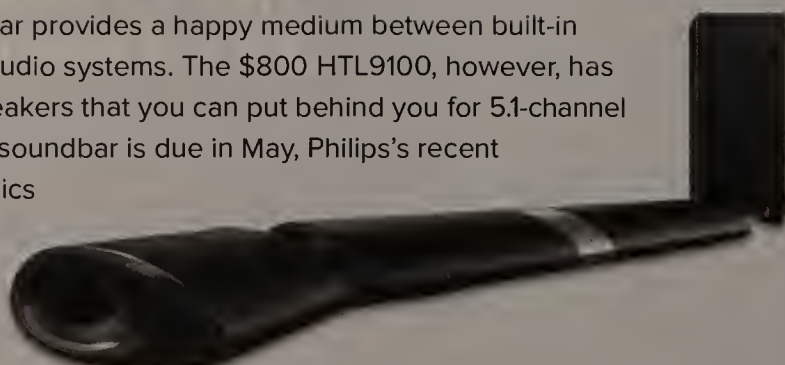
Amazon's iOS-Optimized MP3 Store

Watch your back, iTunes: Amazon is now letting iPhone and iPod touch owners browse and buy from its 22-million-song digital music catalog. To sidestep Apple's rules about taking 30 percent of purchases,

Amazon's store isn't available in a native app, but rather in a Web interface accessible via Safari at www.amazon.com/mp3. The interface is optimized for Apple devices, with a black-and-orange aesthetic reminiscent of iOS's Music app. That optimization also includes touch controls, such as the ability to swipe through carousels of songs and albums. Once you buy a song, it loads into your Amazon Cloud Player, which you can access over the Web or through the Cloud Player app (www.amazon.com).—DAN MOREN

Philips Fidelio HTL9100

For HDTV viewing, a soundbar provides a happy medium between built-in speakers and multichannel audio systems. The \$800 HTL9100, however, has detachable wireless side speakers that you can put behind you for 5.1-channel surround sound. Though the soundbar is due in May, Philips's recent sale of its consumer electronics business casts some doubt on the product's release (www.philips.com).—JONATHAN SEFF



iHome iDL100

Do you charge iOS devices at your bedside? Do you like waking up to music from them? The \$150 iDL100 stereo clock radio has two Lightning docks, plus a USB port for an older iOS device (or a third Lightning product). You can charge and play music from attached devices—the iDL100 even has an auxiliary jack—and you can set multiple alarms to wake to music from your devices or the built-in FM radio (www.ihomeaudio.com).—JONATHAN SEFF



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How to Set Up a Home Recording Studio

It's easier than you may think. Here are our hardware and software recommendations.

BY MICHAEL HOMNICK

Digital audio recording is all about having the right tools—that, and a great sound.

From microphones that reproduce the finest acoustic details to audio interfaces that allow creative manipulation, hardware has a significant effect on your end product. Rounding everything out is the machine you plug that gear into: your computer. Here's what it takes to ensure that your Mac or PC can handle its role at the center of your home recording studio.

Choose a Computer to Record Music

With all of the advanced hardware geared toward digital music recording, you might think that a computer with impressive specs would be necessary. For audio

recording tasks, however, most any consumer-level computer can do the job.

Recording software uses a technique called *multitrack recording*, which needs numerous audio files to be open and running at once. But the relatively modest size of audio files (in comparison with video files) means a modest impact on the computer's CPU and RAM. Projects with ten or more tracks running simultaneously could require some more oomph, but if your system has a processor from the past few years plus 2GB to 4GB of RAM, it should be able to handle any music project. For example, a 2007-era MacBook Pro, with a 2.2GHz Intel Core 2 Duo and 2GB of RAM, can conquer all but the biggest multitrack projects.

You should keep an eye on one other hardware component: the hard drive. Although one audio file doesn't take up much space, file sizes can add up fast in large projects; for example, a typical GarageBand project file containing eight tracks could be a few hundred megabytes. Fortunately, extra hard-drive space is easy to come by. Even if you're firing up a laptop from 2006, hard drives and other forms of external storage provide relatively cheap ways to ensure that you have enough capacity to store your projects.

Consider the assortment of ports on your computer too. If you've had your eye on a FireWire audio interface, remember that a lot of older computers (and newer Macs) don't have FireWire capabilities.

Find Affordable Software

Every home recording studio needs music-production software. The good news is that multitrack recording software has become extremely powerful. Many programs have virtual instruments, drum machines, pitch correction, effect plug-ins, and other editing tools. The bad news is that in many cases such software can cost anywhere from \$200 to \$700—about as much as a new instrument. Popular programs such as Avid Pro Tools (\$699; go.macworld.com/avidpro) and FL Studio (\$199; requires Boot Camp; go.macworld.com/flstudio) hold nothing back, offering tools suitable for even professional users and recording studios.

Fortunately, although it's hard to match the power and flexibility of such programs, a few options will give you control over your audio without breaking the bank.

Audacity: You can handle most audio-editing tasks with the easy-to-use Audacity (free; go.macworld.com/audacity). In fact, if you're just getting started with music production, its small effects library, virtual mixer, and cut-and-paste editing tools may be more than you need to get your musical ideas recorded.

Apple GarageBand: Shipping with Apple computers as part of the iLife suite, GarageBand (go.macworld.com/garagemac) is a digital audio workstation with tools that rival those in much pricier applications. GarageBand comes with a massive library of virtual instruments and



Made for Touch

GarageBand for iOS has virtual instruments and turns your iPad into a synthesizer.

drum loops that turn your keyboard into a virtual synthesizer. If you own a Mac, you might already have GarageBand. But if you need to buy it, you can find GarageBand '11 in the Mac App Store for \$15.

Reaper: This software further blurs the line between expensive professional tools and wallet-friendly amateur apps. A full license for Reaper (www.reaper.fm) costs \$225, but developer Cockos offers a \$60 discounted license for individuals working on personal projects or for commercial efforts where yearly income doesn't exceed \$20,000. So until you hit the big time, Reaper is a great option if you want a professional-quality application at a price the average person can afford.

Bring an iPad Into the Mix

Any discussion of modern home recording would fall short without a mention of the iPad, which is now an established tool for on-the-go music creation.

While the tablet's size presents obvious benefits for musicians with limited space, the iPad's real music potential becomes obvious when you pair it with a powerful audio-production app such as GarageBand for iOS (go.macworld.com/garageband), which has impressive features that are tailored for touchscreen use. For starters, the app's virtual touch instruments and samplers tap into a huge library of sounds, turning your iPad into a fully equipped synthesizer. And at \$5 on Apple's App Store, the price is right, especially in comparison with high-end desktop audio-production software.

Other iOS apps include Music Studio (\$15; go.macworld.com/musicstudio), which provides lots of virtual instruments and sounds, and MultiTrack DAW (\$10; www.harmonicdog.com), whose ability to record up to 24 stereo tracks simultaneously (with an in-app upgrade) makes it a great option for recording live gigs.

Hardware manufacturers are catching on to the iPad's potential in the recording studio. Some audio interfaces, such as Focusrite's iTrack Solo (\$160; go.macworld.com/itrack), are specifically designed for use with the iPad, featuring all the things you might expect on an audio interface (multiple input channels, phantom power, volume control knobs), along with specially designed connectors for iPad input.

If you already have an audio interface or USB mixer, you can use a converter such as Apple's iPad Camera Connection Kit (\$29; go.macworld.com/camkit) to connect any device with a USB output to your iPad.

Put It All Together

It's easy to get overwhelmed when you are considering the seemingly endless combinations of hardware and equipment geared toward recording music. Take a step back and think about what you want to accomplish with your home studio.

For most people, a computer paired with basic audio-production software, a microphone, and an audio interface of some kind provides more than enough flexibility. Just add an iPad—either as a primary recording tool or as a portable backup—for even more recording power.



The iPad's real music potential becomes obvious when you pair it with a powerful audio-production app such as GarageBand.

Can Canon Save the Point-and-Shoot?

The company seeks to breathe new life into the compact-camera sector with the PowerShot N.

BY DERRICK STORY

Just when I was ready to send Canon off to the retirement home, it introduced one of the most creative cameras I saw at January's CES 2013 trade show. The PowerShot N (available in April for \$300, in black or white) has a new square design with few buttons, no conventional shutter release, and a tilting, swinging, 2.8-inch 461,000-dot LCD touchscreen that fills the entire back of the camera.

What prompted this departure from tradition? In 2011 compact-camera sales were down as much as 30 percent in some sectors—and the numbers didn't improve in 2012. One factor contributing to the sales slump was the increased adoption of smartphones. So why not build a gadget that enhances the photo capacity of existing mobile devices? With the PowerShot N, Canon is adopting an “if you can't beat 'em, join 'em” strategy.

Designed for Creativity

You trip the shutter by pressing one of two metal rings that surround the 8X-optical-zoom lens (the other ring controls the zoom itself). This symmetrical design lets you hold the camera at a variety of angles to compose the image.

When you enable Creative Shot mode, the camera takes a series of bracketed exposures and applies processing filters

The PowerShot N attempts not to replace your smartphone or tablet, but to work with it. One of the three buttons is dedicated to connecting via Wi-Fi.

and crops. The outcome is five imaginative versions of the photo; keep those you like. You never know what you'll get, but the examples I saw were quite good.

You can probably tell that this isn't a camera for everyone. It isn't supposed to be. And it's this type of risk-taking that



Small but Versatile

The PowerShot N has a ring that you press to trip the shutter. This design (along with the tilting LCD) encourages creative angles.

may help the compact-camera segment survive in the smartphone era.

The PowerShot N attempts not to replace your smartphone or tablet, but to work with it. One of the three buttons is dedicated to connecting to your mobile device via Wi-Fi. Canon's free Camera-Window app facilitates image transfer. The thinking is that you can use your existing tools to share images to Facebook, Flickr, Instagram, and Twitter. Why not just shoot with your iPhone in the first place? Canon is hoping that you'll be lured by the picture-taking prowess of the PowerShot N: It offers 12.1 megapixels, using a 1/2.3-inch sensor that's larger than those in most phones. That, along with Canon's most

system lets the camera select the best image-stabilization settings for the conditions. Exposure modes include Intelligent Auto and Program. Effects options feature Toy Camera, Miniature, and Monochrome. Basic settings such as white balance, exposure compensation, and self-timer are easy to access via the touchscreen.

And then there is video. The PowerShot N has both 720p and 1080p video capture, plus a Super Slow Motion Movie mode. The LED light on the front operates as a flash for stills or as a movie light.

Charged and Ready for Action

You can recharge the camera with its USB cable, via a wall charger or connection to your computer. Canon's Eco mode, when enabled, offers 30 percent longer battery life, primarily by dimming the screen when the camera has been idle for 10 seconds.

Canon has switched to MicroSD for storage, since space is at a premium with the 2.37-by-3.09-by-1.15-inch PowerShot N. Note that the camera doesn't capture in raw format—stills are JPEG only.

This is a camera that you have to hold to appreciate. It prompts you to try different angles and to play with your photography. If your images are in a rut, slide this camera into your pocket and go explore the world.

Montaj Promises Hollywood Flair for Your Mobile Video Clips

BY JACKIE DOVE



Even in the age of YouTube, shooting and sharing on-the-spot video can be a challenge. Unless you have a genuine vision for your movie, it's often a chore to decide what to include and what to trim, what music to use, which transitions look best, and whether to apply artistic filters. The process can be baffling and discouraging. And despite your best efforts, the end product can still look cheesy.

A new free creation and sharing app called Montaj (go.macworld.com/montaj) seeks to reduce the creative complexity of the process, yet at the same time deliver high-quality video that crackles with originality and creative spark.

Montaj is the result of a collaboration between longtime friends Damir Gjokaj and Dan Long. It's the iPhone's newest antilinear digital video-editing tool. The app lets you shoot clips in 5-second intervals and then arrange them to create a short video. You can share that video on Montaj's own network, or on Facebook, Twitter, or YouTube. Montaj videos are actually hosted on YouTube, but when you upload to that service, your videos remain unlisted to maintain your privacy

until you choose to make your video public or share it with specific people.

You can also integrate Montaj videos into your camera roll or export them to your computer for further editing in a program such as iMovie or Final Cut Pro.

The app lets you simply shake your phone to automatically edit and assemble clips. You get a new song, a new edit, and a new filter with each shake.

Why another shooting, editing, and sharing app? What's wrong with Google's new YouTube Capture, Viddy, or even the iPhone's own Camera app, for that matter? "We wanted to make everyone a videographer the way Instagram has made everyone a photographer," Gjokaj says, "by addressing the issue of why many people still find video creation so hard."

Indeed, Montaj is dead simple: The app will not let you shoot a single clip longer than 5 seconds. You can shoot in intervals until you've assembled the clips you want (the limit is 40). A pane lets you look at all of the clips, storyboard style, and remove or rearrange clips.

Arrange Your Clips

You can shoot new video with Montaj as well as import existing clips from your camera roll.

You don't have to rearrange them, however, because the app lets you simply shake the phone to auto-

matically edit and assemble the clips. You get a new song, a new edit, and a new filter with each shake. With access to the songs in your iTunes library and the app's filters, you have a huge number of potential movie versions.

But that doesn't mean everything has to be random. You can choose songs and lock them into specific sequences, and do the same for filters and clip order. Just experiment with the effects you're not sure of until you see something appealing. Then, adjust the volume, add voiceovers, and edit clip length if you wish.

The idea is to shoot the way pros shoot a Hollywood movie: just enough to tell the story. No longer should you have

to shoot 20 minutes of footage to get 60 seconds of usable content. "It had to be easy enough to learn on the first try, but robust enough to grow into—and it had to be shorter," Gjokaj says. "There's no story in a 15-second clip. There's just nothing. It's like content purgatory." Montaj is built to let you shoot less and hasten the pace.

What about all that video you've shot on your iPhone? No problem: You can use anything you want in a Montaj video by importing any video on your phone, and Montaj works well with other apps, too.

Montaj runs on iOS 6 and works on the iPhone 3GS and later, as well as the iPad.



Outsmart Your Camera by Turning Off Autofocus

BY DAVE JOHNSON

HOW-TO

Autofocus is one of those modern marvels that we take for granted—even the cheapest camera is good at focusing precisely on your subject. Unfortunately, sometimes your camera gets the focus wrong, or takes too long. Let's look at some instances in which you should consider doing it the old-fashioned way.

Autofocus Refresher

First, let's review how autofocus works. When you press the shutter release, the camera quickly focuses on whatever is in the middle of the viewfinder. But what if you don't want to focus on that? Some cameras use built-in logic to sniff out the real subject in the frame and focus on it, whether it's dead center or not. Read your camera's manual to learn how to control that option. Also, many cameras have focusing zones: By moving little boxes around in the viewfinder, you can tell the camera to focus on the dead center, or on the left, right, top, or bottom of the frame.

You also have an easier method that works with pretty much any camera. First, press the shutter release halfway down to activate the camera's autofocus; it will lock on to the subject in the middle of the viewfinder. Then, maintaining light pressure on the shutter button, you can

Whenever the light is dim—and the overall contrast is low—your camera will struggle to focus properly. It may take too long, or the focus might be incorrect.

recompose the shot to your heart's content. When you finally press all the way down, you'll get a shot with the focus set the way you like. The photo above is a classic example of recomposing a shot with the focus locked.

When Not to Use Autofocus

Here are some situations, however, in which you might want to turn autofocus off and rely on manual focus instead

Changing Focus By keeping light pressure on the shutter button, you can re-compose your shot.

(check your user guide to learn how).

Beware of interference: One of the most common complications

arises when you're shooting through a barrier, such as a window, screen, or fence. Some cameras' autofocus systems get confused and have trouble focusing on the more distant subject, so in this case you should dial the focus in yourself.

You should be at infinity: What if you're shooting a distant subject, and time is of the essence? Say you're snapping action photos of a sporting event, an animal, or fireworks. You'll lose the shot if your camera takes too long hunting for focus, but here's the rub: The focus should probably be set at infinity, anyway. Switch the camera to manual-focus mode, spin the focus all the way to infinity, and leave it there.

Low light: Whenever the light is dim—and consequently the overall contrast is low—your camera will struggle to focus properly. It may take too long, or the focus might be incorrect. In most cases it's easier to focus the photo yourself, especially if the subject isn't moving.

Shooting panoramas or HDR photos: Anytime you're taking a sequence of photos and combining them digitally afterward, it's a good idea to ensure that the focus is identical in each shot. When you shoot a panoramic series, typically

you want to set to infinity; again, you'll be able to shoot faster if you set the focus to manual and dial in infinity yourself.

Switching to manual mode is more critical for HDR (high dynamic range) photos, since your camera's autofocus might choose a different point to focus on in each shot. If that happens, when you combine them on your computer in an attempt to get a broader tonal range, the entire shot will wind up looking soft.

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Reviews

Hardware, Software, and Accessories for Your Creative Endeavors



Hardware

Samsung NX1000

★★★★; \$500; Samsung; samsung.com

While Samsung has streamlined aspects of the NX1000, the least expensive of its NX mirrorless interchangeable-lens cameras, it has not scrimped on the sensor size or resolution, building in a 20-megapixel APS-C sensor.

Bundled with a 20–50mm lens, the NX1000 weighs 0.48 pound (without the battery or media card) and measures 4.59 by 2.46 by 1.44 inches. The unit is sturdily built, and its grip is reasonably comfortable.

The 3-inch, 921,000-dot LCD is clear and bright except in harsh sunlight. The screen is fixed, and it doesn't brighten up much in superlow light.

Like Samsung's NX20 (see the review to the right), the NX1000 has wireless functionality. Options include Samsung's MobileLink iOS app, which you can use to send and view images on your iPhone. You'll also find an iOS remote app that gives access to a limited number of camera features, including the shutter.

Color rendition is quite good—accurate but natural, and not overly saturated. Exposure accuracy is mixed

but the camera performs well under most conditions; it does falter a bit under extreme lighting, however. Most test shots had excellent detail, and the lens produced images that were sharper than expected. With the camera's ISO range of 100 to 12,800, I felt comfortable shooting at 800 and even up to 3200 in a pinch.

Video quality is okay, but footage can look a bit jiggly. Exposure accuracy is good, particularly if you set the aperture and shutter speeds. Audio is average at best.

The NX1000 manages to push out images at up to 8 frames per second (up to 11 shots) or 3 fps (up to 15 shots). Burst mode can capture up to 30 fps, but at lower resolution.

Samsung's versatile NX1000 will please budget-conscious enthusiasts seeking good image quality.—THEANO NIKITAS



Pentax K-30

★★★★; \$800; Pentax; pentaximaging.com

The weather-sealed, dust-proof, coldproof Pentax K-30 is an affordable, versatile DSLR that you can take just about anywhere.

The 16-megapixel APS-C CMOS sensor produces JPEGs and DNG files; overall resolution is 4928 by 3264 pixels. The exposure accuracy

is good, assisted by the 77-segment metering system. Burst mode tops out at 6 frames per second—plenty fast for most action situations.

Images appear for review on a 3-inch, 921,000-dot fixed-back LCD. The glass pentaprism viewfinder is bright and offers a 100 percent field of view (a feature you don't often see in sub-\$1000 DSLRs). Image stabilization is sensor-based.

My favorite features include built-in HDR, an interval timer, a multiple-exposure special effect, and a button for quickly switching to raw format.

While the K-30 ships with a lithium power cell, it's also designed for four AA batteries (lithium, nickel-metal hydride, or alkaline); all you need is an inexpensive adapter.

The focus of the K-30 is still photography, not video. That doesn't mean you can't record good movies—the camera just doesn't make it easy to do so.

The K-30 creates excellent raw files that are friendly to post-processing. It offers good detail and well-controlled image noise, even at high ISOs; you can shoot comfortably at ISO 1600 or 3200. JPEG quality is good, crisp, and colorful. You might see some highlight clipping in contrasty situations, but the highlight-protection setting can help control this effect.

It's hard to find fault with this camera, especially for still photography. I would prefer that the Focus Mode Switch lock into place more securely.

I also found that the camera was slow to wake from sleep.

The K-30 is an excellent DSLR for adventure photographers and creatives who will enjoy its in-camera effects. For most outdoor situations, the 18–135mm zoom provides plenty of width and reach, yet it doesn't add much weight to the package.—DERRICK STORY



Samsung NX20

★★★★; \$1100; Samsung; samsung.com

The top model in Samsung's NX line, the 20-megapixel, Wi-Fi-equipped NX20 mirrorless interchangeable-lens camera includes an APS-C-size CMOS sensor, a pop-up flash, an electronic viewfinder, and an AMOLED LCD. The latter trio are not always found on cameras in this price range. The EVF is large and bright, as is the articulated 3-inch LCD.

Next to its NX1000 sibling, the NX20 has a DSLR-like look and feel. The body measures 4.8 by 3.63 by 1.56 inches and weighs 0.75 pound (without the battery, media card, or lens). The camera is well built, but the 18–55mm kit lens feels a little less sturdy, and the zoom mechanism is somewhat stiff.

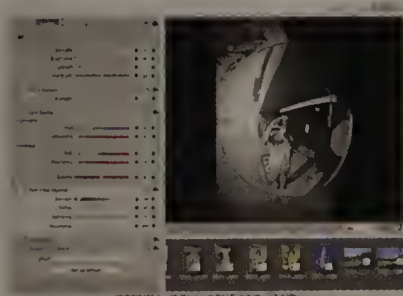
Sharing images wirelessly is pretty easy. I tested the MobileLink app on an iPhone 4S, and it worked seamlessly.

Video shot in daylight looks good, with accurate exposures and generally smooth playback. Stereo sound is decent, but you'll need the optional microphone for better audio.

The NX20 has a top shutter speed of 1/8000 second, albeit with an electronic shutter (the mechanical shutter maxes out at 1/4000 second). It can take up to 8 frames per second, filling the buffer with 11 full-resolution JPEGs or eight raw images. Patience is required while it saves the images. Autofocus, particularly in good light, is generally responsive. Shot-to-shot and flash recycling times are respectable.

Colors appear natural but well saturated. Exposures are pretty much on the mark under average conditions, and the camera held on to shadow and highlight detail in most test shots. The ISO ranges from 100 to 12800, but the best images were those shot in daylight at lower ISOs. The 800 and 1600 ISO levels are still usable.

A pleasure to shoot with, the NX20 has a well-rounded feature set.—THEANO NIKITAS



Software

ACDSee Pro 2

★★★★; \$100; ACD Systems; acdsee.com

ACDSee Pro for Windows, now in version 6, is a fast and flexible photo management and processing program. The Mac version, ACDSee Pro 2, resembles its older Windows

sibling in many positive ways, though it is not as mature.

It has three modes: Manage, View, and Develop. With easy-to-use tools for “tagging” (rating), labeling, and applying keywords to images, Manage mode is the program’s strong suit. You don’t have to import images to view them; instead, it uses your computer’s file system for basic organization.

ACDSee’s batch-processing feature provides access both to image-adjustment presets and to file-manipulation commands such as copy, move, and resize. Admittedly, the interface for

this feature is a bit geeky, and the batch processing is the closest thing the program has to an export option. Still, once you figure it all out, the batch workflow can be powerful.

Develop mode shares some advanced features (tools to correct lens or perspectival distortion, chromatic aberration, or fringing) with the likes of Aperture and Lightroom. It lacks other advanced features, such as selective editing, and even omits some basic tools found in Google’s free Picasa.

The program has no tool for magnifying a part of a photo

and viewing it in one step. And you can’t view an image full-screen in Develop mode; rather, you have to exit to View mode, which causes your edits to that point to be saved.

That brings me to one of my biggest complaints about this release: It’s slow. It’s a 64-bit program, but saving an edited image takes about 10 seconds on my MacBook Air, or 5 to 6 seconds on my iMac.

Regardless, ACDSee Pro has a great pedigree, and even if version 2 isn’t everything you might want, it shows a lot of promise.—WILLIAM PORTER

Top Products

YOUR GUIDE TO THE BEST
HARDWARE WE’VE TESTED

CAMCORDERS High-Definition				
PRODUCT	RATING	PRICE ¹	TYPE	MORE INFO ²
Bloggie Live (pictured) www.sony.com	★★★★	\$100	Full HD	go.macworld.com/bloggielive
HMX-Q10UN www.samsung.com	★★★★	\$167	Full HD	go.macworld.com/hmxq10un

DIGITAL CAMERAS Point-and-Shoot				
PRODUCT	RATING	PRICE ¹	TYPE	MORE INFO ²
PowerShot G12 www.canon.com	★★★★½	\$380	10-megapixel	go.macworld.com/canong12
PowerShot SX260 HS (pictured) www.canon.com	★★★★	\$209	12-megapixel	go.macworld.com/sx260hs

DIGITAL CAMERAS SLR				
PRODUCT	RATING	PRICE ¹	TYPE	MORE INFO ²
D7000 www.nikon.com	★★★★½	\$713	16-megapixel	go.macworld.com/nikond7000
EOS Rebel T3i (pictured) www.canon.com	★★★★½	\$429	18-megapixel	go.macworld.com/canonT3i
Olympus OM-D E-M5 www.olympusamerica.com	★★★★½	\$880	16-megapixel	go.macworld.com/omdem5

PRINTERS Inkjet				
PRODUCT	RATING	PRICE ¹	TYPE	MORE INFO ²
Pixma MG8220 www.canon.com	★★★★½	\$257	photo	go.macworld.com/mg8220
WorkForce Pro WP-4020 (pictured) www.epson.com	★★★★	\$90	photo	go.macworld.com/wfprowp4020

¹ All prices are the best current prices taken from a PriceGrabber survey of retailers at press time. ² In a browser’s address field, typing a Go URL, exactly as shown, takes you to a product’s review or overview.

Help Desk

Answering Your Questions and Sharing Your Tips About Getting the Most From Your Mac

Mac OS X Hints

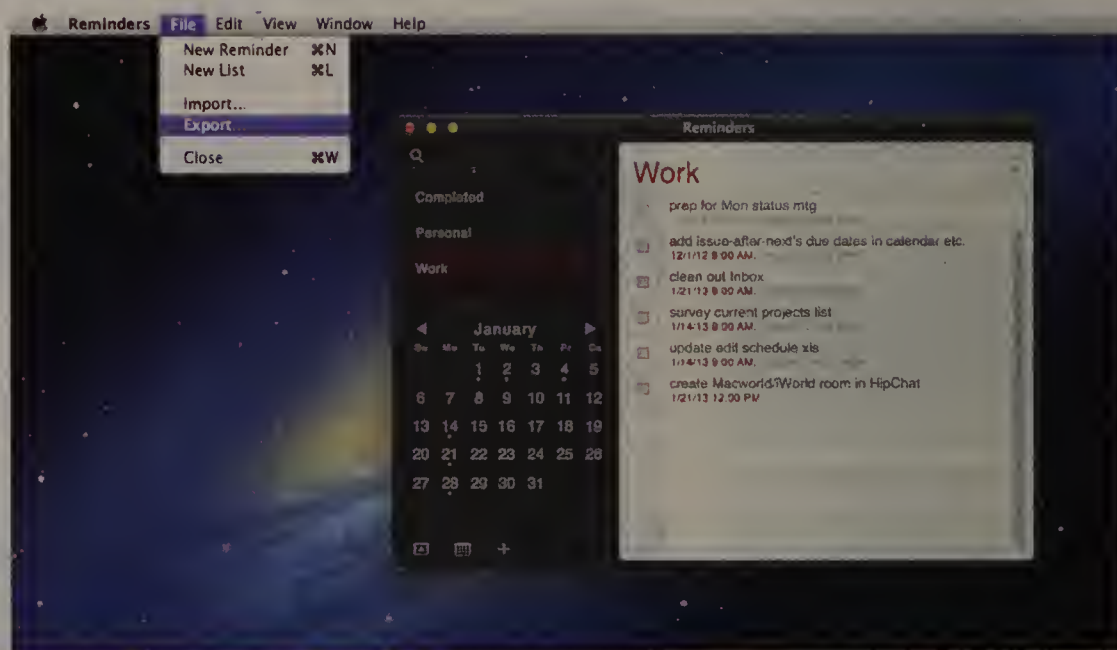
The insider tips you won't get from Apple.

BY KIRK McELHEARN

Back Up Reminders

If you use the Reminder widget (go. macworld.com/reminder), you have a couple of ways to back up reminders. First of all, you can find Reminder .ics files in *youruserfolder/Library/Calendars*; as long as that folder is backed up, whether by Time Machine or by some other system, you can always retrieve a backup copy.

Another way is to export your reminders. You probably know that you can export a calendar in the Calendar app by selecting *File → Export*; that will save an .ics file wherever you want. But you can also do the exact same thing—*File → Export*—in Reminders.



Quickly Hide Calendars in Calendar

Sometimes you may want to quickly display just one calendar and hide all the others—to see upcoming birthdays in month view, for example. If you consult Calendar's Help, you'll learn that you can toggle all calendars visible and hidden by

holding down the ⌘ key while you click any calendar's checkbox in the Calendar list. What Help won't say is that, if you hold down ⌘-<Option>, then click a calendar's checkbox, you'll quickly hide all calendars except the one you're selecting. ⌘-click another calendar to show them all again.

Add Photos to Messages in iOS Mail

You can add a photo or video to an email message in iOS Mail without going to the Photos app—but how is not obvious. To do it while composing a message, tap and hold on the email until the Select, Select All, Paste menu appears. Tap the arrow button at the right of this menu, and then tap *Insert Photo or Video*. Select the photo or video you want to embed, and that's it.

Shortcut to iOS Mail Drafts

Accessing saved email drafts can be challenging when you have multiple email

Reminders Backup To create a backup copy of your reminders, select *File → Export*.

accounts on your iOS device: You have to go to the Accounts section of the Mailboxes window, select the account you were sending from, and find its Drafts folder. But here's a shortcut: In Mail (iOS 6 only), tap and hold the *Compose* icon at the bottom right of the screen. That will produce a Drafts screen, where you can either compose a new message or select a saved draft to work on.

Find App Folders in iOS Spotlight

If you're like most owners of iOS devices, you keep the apps you use most frequently in the Dock or on the home screens, and put less-commonly used apps in folders. Trouble is, it's easy to forget which folder a given app is in, even if you're assiduous about organizing and labeling them. But a simple trick can tell

Have a Hint to Share?

Navigate to MacOSXHints.com to submit it. This month's column was based on tips from Franck Guadagnini and anonymous contributors. Each month, the author of our favorite reader-supplied tip is eligible to receive a *Help Desk* mug.



you in which folder an app is located.

Swipe right to display the Spotlight search screen, and then type the first few letters of the app's name. The app will display in the list, and to the right of its name will be the folder that it's in.

You could just launch the app from the list of search results, but maybe next time you'll remember which folder to look in—which can be quicker than typing in the search field. (Note that this trick works only for apps, not for Web shortcuts that you might have saved.)

Speed Up Mission Control Animation

It's possible to adjust the time it takes for Mission Control to complete its animation. If you're impatient, this can be a good thing—though animation quality may decrease. To do this, open the Terminal utility and enter the following: **defaults write com.apple.dock expose-animation-duration -float 0.1 ; killall Dock**

In this case, 0.1 represents the amount of time Mission Control will take to finish. You can set it to any number you want; try several different ones to see how they affect the animation. Press <Return> to change Mission Control's animation time.

To revert Mission Control back to the default, enter the following in Terminal, then press <Return>: **defaults delete**

com.apple.dock expose-animation-duration ; killall Dock

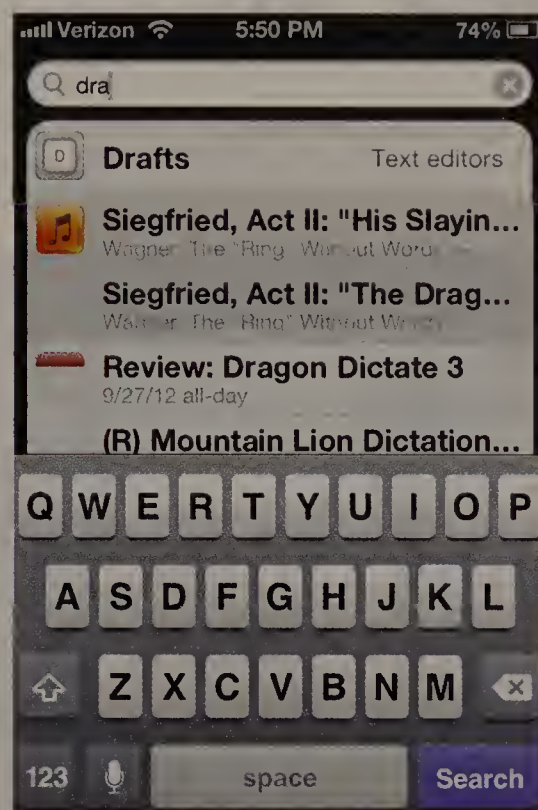
Clear Out Up Next From Keyboard

Even if you consider yourself an iTunes whiz, the new Up Next feature in iTunes 11 can be confusing. One thing that may make it easier to work with: Open *Up Next* by pressing ⌘-<Option>-U, and then press <Shift>-<Tab> twice to highlight the Clear button. Press the spacebar to "click" that button. Pressing <Esc> will close the list. (Note that these keyboard tricks work only if you've selected All Controls at the bottom of the Keyboard Shortcuts tab in the Keyboard preference pane in System Preferences.)

While you're at it: If you start playing an album, the first track is displayed in the iTunes LCD, while the other tracks appear in Up Next. If you open that menu and click on Clear, you'll remove the remaining tracks from the queue, while the first track keeps playing. To clear this track as well, and stop playback, open the *Up Next* queue and click the *Clear* button again. This little trick can be particularly useful if you want to stop playing the current track and add new items to the Up Next queue.

Sync Empty Playlists

Normally, you can sync playlists from your Mac to an iPhone or iPod by



Which Folder? To find out where an app is hiding, just start typing its name; its folder name will appear in the results.

selecting the device in the iTunes sidebar, navigating to the Music tab on the right, and checking off the playlists you want. But iTunes 11 has a catch: If you select an empty playlist, it will automatically be unchecked when you sync.

Here's why this can be a problem: Let's say you keep a few empty playlists around—*New Podcasts*, say—to which you sometimes manually add new tracks. Let's say that most of the time you want those scratch playlists to be synced to your device. But if they're empty, they won't be synced, and the checkbox will be unchecked. That means that next time you plug in your device, those playlists won't be synced, because they were deselected last time. You have to go back in and manually reselect them.

The solution: Add a very short silent track to the beginning of each of these playlists. You can create them in GarageBand or some other audio app. In my case, these silent tracks are 0.1 second long. As long as those tracks are in the scratch playlists, those playlists will never be empty, meaning that they'll remain selected in the Music tab and thus will always sync with your device.



Clearing Up Next Remove items from the Up Next list by pressing ⌘-<Option>-U.

Mac 911

Solutions to your most vexing Mac problems.

BY CHRISTOPHER BREEN



Convert Image Files to Comics

Q: I'm an artist-in-training, and I have a few of my own "comics" saved as JPEG files. I'd really like to view them in a comics-reader app on my iPad, but how do I format them?

Will Simpson

A: Comics apps such as Comic Zeal (go.macworld.com/comiczeal) are compatible with the DRM-free comic-book file formats .cbr and .cbz. Those are both compressed formats, related to RAR and ZIP files, respectively.

Converting your JPEG files to a comics-compatible format is a cinch. First, make sure that you've numbered your images in the correct page order, naming them (for example) **My Comic-001-001.jpg**, **My Comic-001-002.jpg**, and so on (the first set of digits is the issue number, and the second is the page number), or pages may not display in the proper sequence.

Place the pages in a folder, and name

the folder with the comic title and issue number, entering something like **My Comic #1**. Now <Control>-click (right-click) the folder and choose *Compress "nameoffolder"*. The folder will be converted into a .zip archive called (using our example) 'My Comic #1.zip'. Change the .zip extension to **.cbz**.

And that's it. You can now import your comic into your comics-reader app via the usual methods. With Comic Zeal, doing so involves tethering your iPad to your Mac, launching iTunes, selecting your iPad within iTunes, choosing the Apps tab, locating the Comic Zeal entry in the applications area, and then adding your .cbz files to copy them to the iPad.

DVD-less Snow Leopard Installation

Q: My sister has an older MacBook Pro running Leopard and wants to upgrade to Snow Leopard. Her DVD drive is broken; I have a MacBook Air

A Zeal for Comics
Compress (zip) and rename folders full of images to create comic-compatible files.

without a DVD drive, and only a disk image of Snow Leopard. When I place that disk image

on her MacBook, mount it, and try to run the Snow Leopard installer, I'm told that I need to burn it to disc, which isn't an option. What do I do?

Steven Harris

A: Dig up a 16GB (or larger) USB key drive. Jack it into your MacBook Air and launch Disk Utility (which is located in /Applications/Utilities). In Disk Utility, select the key drive, and click the *Partition* tab. From the Partition Lay-out pop-up menu, choose *1 Partition*; confirm that the Format pop-up menu reads 'Mac OS Extended (Journaled)', and click *Options*. In the resulting sheet, select *GUID Partition Table* (if it's not selected), and click *OK*. Click *Apply* to format the key drive.

Double-click the installer disk image to mount it. (Not mounting the image may otherwise result in an error.)

Click Disk Utility's *Restore* tab. Drag the disk image of your Snow Leopard installer (likely called 'Mac OS X Install DVD.dmg') into the Source field. Drag the mounted key drive to the Destination field. Click the window's *Restore* button; and in the sheet that appears, click *Erase*. Enter your password when prompted, and click *OK*. This will copy the image to the key drive. (The procedure took about 49 minutes with my 2012 MacBook Air.)

When the job is done, unmount the key drive from your Mac and plug it into your



Have a Problem?

Go to the Mac 911 forum (macworld.com/2467) to ask about your misbehaving Macs and applications.

sister's MacBook Pro. Restart her Mac, and hold down the *Option* key when the Mac shows signs of life. In the startup window that eventually appears, select the key drive to boot from. The Mac will boot into the Snow Leopard installer. Proceed with the installation.

Creating Redundant Time Machine Backups

Q: Is there a way to create multiple Time Machine backups automatically?

Jeremy Inglis

A: Yes. Choose a hard drive attached to your Mac or a network volume as your second backup destination. Launch System Preferences and select *Time Machine*. Click the *Select Disk* button and choose that second volume. Click *Use Disk*, and a sheet will appear asking if you want to replace your original backup destination or to use both volumes. Click *Use Both*. Time Machine will then start creating a backup archive on the second volume and back up your Mac to it.

From that point on, Time Machine will alternate its backups between the two volumes: It will back up first to Volume A (whatever it is) and then, an hour later, to Volume B. If you disconnect one volume, Time Machine will continue backing up to the one it can access. Then, when you bring the previously disconnected volume back on line, Time Machine will back up to it so that the two volumes hold approximately the same data.

I say “approximately” because, if you have created any new documents since temporarily disconnecting that one volume, the new backup will be more up-to-date than the other one. This means that when it is time to restore, you should pay attention to which volume holds the more recent backup.

About Really Old Word Files

Q: I have many old Microsoft Word 5 documents on my iMac. How can I recover the text of these files with my current copy of Microsoft Office 2011?

Karl Lacher

Bugs & Fixes BY TED LANDAU



AirPort Extreme Drives and Multiple Macs

OS X's Time Machine can back up a drive to any other drive that is physically connected to your Mac, internal or external. It can also back up to Apple's Time Capsule. The primary advantage of Time Capsule is that its drive is accessible to any Mac on your local network, permitting you to back up multiple Macs to the same drive simultaneously. Plus, AirPort Extreme supports adding a hard drive to its USB port. Once you've connected such a drive, you can enable file sharing, so multiple users can share data from the drive. You'd think this means Time Machine can back up to a USB drive connected to an AirPort Extreme. But you would be wrong.

Apple states: “Time Machine can't backup to an external drive that's connected to an AirPort Extreme....” This admonition hasn't stopped people from trying to do it anyway. The good news is that, over the years, many (though not all) users have successfully gotten Time Machine to play nice with a networked USB drive connected to an AirPort Extreme.

I have been half-lucky. On my first try, I successfully got my wife's iMac to back up to a USB drive I had connected to our AirPort Extreme. But this success was of limited value to me. I would have been better off if I could have used the same USB drive to hold Time

Machine backups from multiple Macs.

Unfortunately, every time I enabled Time Machine on my Mac Pro, adding it to the iMac backup already in play, Time Machine failed—because the ‘sparsebundles’ responsible for holding the data were corrupt.

I reasoned that the corruption might somehow have been precipitated by my attempting to back up two Macs to the same drive. If so, perhaps if I partitioned the drive, and backed up each Mac to a separate partition, Time Machine would consider this to be like one Mac per drive. It worked! I have now gone a month without encountering any Verification (or any other) Time Machine errors. I have tested out restoring files from the Time Machine backups—and they succeed.

I can't offer any guarantees. I may still get an error tomorrow—or six months from now. However, given past history, I'm optimistic that I'm now home free. If you've been unable to get an AirPort Extreme-connected drive to work with Time Machine and multiple Macs, partitioning may be the solution. Just make sure that you have a secondary backup before you start experimenting with this approach.

Senior Contributor **Ted Landau** is the founder of MacFixIt (www.macfixit.com). Share your problems at bugs@macworld.com or on Macworld.com's Mac 911 forum.

A: Launch Word 2011 and choose *File* → *Open*. Navigate to the document you want to access, and click the *Open* button. With luck, your file will open with something close to its original formatting. (If it doesn't, make sure that you have the latest version of Office—choose *Help* → *Check for Updates*.) I tried this method with a Word 5 file, and it opened without garbage characters. This approach is hardly ideal, as it requires you to open each file individually, but at least it works.

Unlike in days of old—when you could purchase a converter utility to handle the

job—alternative methods are now far more limited. For the most part you can attempt to open such old files in a text editor or within an open-source suite such as NeoOffice (www.neooffice.org) or LibreOffice (www.libreoffice.org).

When opening my test file with TextEdit and these two applications, I saw a fair helping of random characters. Using Find and Replace can clear out a lot of the junk, but you won't want to do that with more than a couple of documents.

The lesson: Save your files in formats likely to be supported over time—Rich

Text Format (RTF) or PDF, for instance—and you'll have a better chance of ensuring your data's long-term accessibility.

Mounting an AirPort-Attached USB Drive

Q: I've attached a USB hard drive to my AirPort Extreme base station and use it as a storage location for all the computers on my network. It's convenient, but I hate having to mount the drive manually whenever I log out or restart one of my Macs. Is there a way to configure it so it automatically mounts on each Mac's desktop?

Alec Lancaster

A: Yes. One way to do this is as follows: Open a Finder window, select your base station from the sidebar (found under the Shared setting), and mount the drive. Then launch System Preferences, select the *Users & Groups* preference (called 'Accounts' in earlier versions of the Mac OS), click the Lock icon, enter your user name and password, and click *Unlock*. Click the *Login Items* tab and drag the icon of the mounted drive into the list of login items. Finally, quit System Preferences. When you next log in or restart your Mac, the drive attached to your base

station should automatically mount.

This doesn't always work. The Mac may report that the mounted drive (if found) can't be used. So try this instead: Launch Automator, select *Application* in the template sheet that appears, and click *Choose*. In Automator's Search field, enter **server**. From the results that appear, drag the *Get Specified Servers* and *Connect to Servers* actions into the

workflow area. Click the *Add* button in the Get Specified Servers action, and select your base station in the Choose URL window that appears. An address like 'smb://10.0.1.1:445' will appear in the Server Address field (as shown in "Getting Addressed" at right). Click *OK*.

Click the *Run* button in the workflow window. If prompted for a name and password for the server, make sure that *Registered User* is selected and enter your Mac's user name along with the base station's password—the password necessary to configure the base station. Then enable the *Remember This Password In My Keychain* option and click *Connect*. The drive attached to the base station will mount on your system's desktop. Save the workflow to the desktop.

As before, we'll add the workflow application to your login items. The same idea works here: Unlock the preference and drag the workflow into the login items area. When you next log in or restart your

Mac, the drive should mount. Repeat this procedure for each Mac that you'd like to use with the networked drive.

Getting Addressed
You can mount an AirPort-attached drive more reliably via the base station's network address.

Mac 101

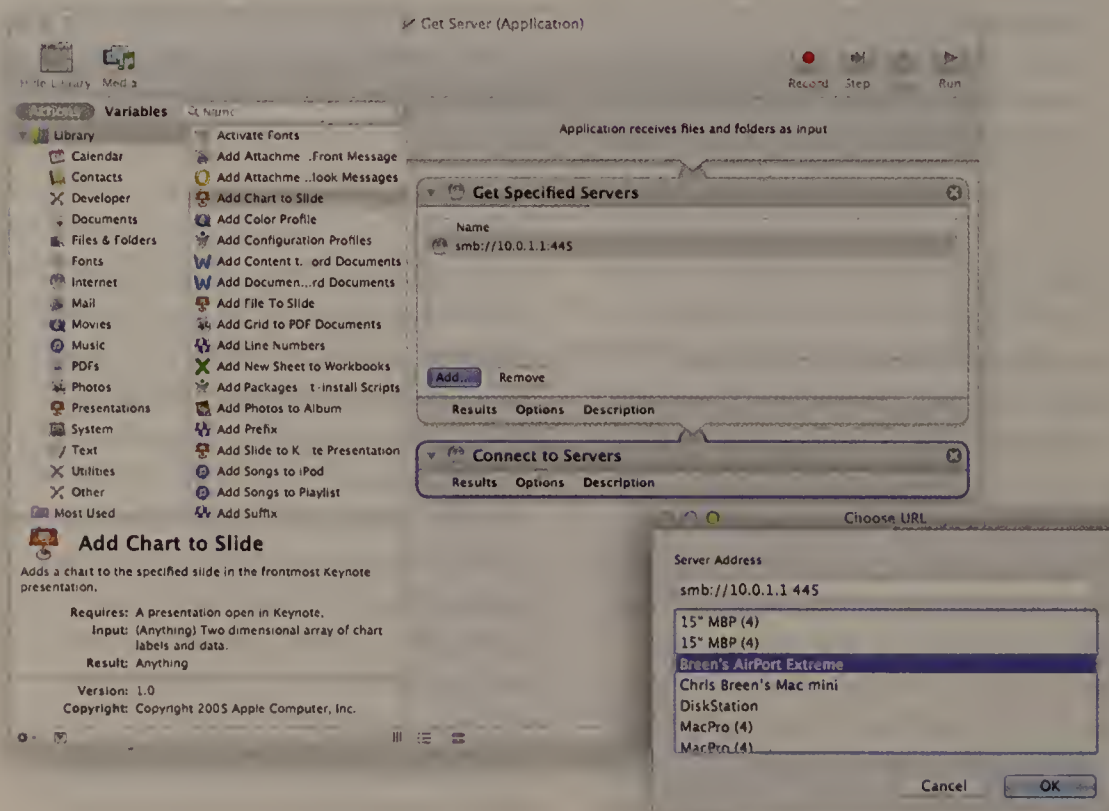
Reviving a Dead Apple Remote

Q: I have several old Apple remote controls—the white ones. I hear that they work with today's Apple gear, but all of mine are dead. Can I do anything to revive them?

Greg Willis

A: Take a close look at the bottom of the remotes, and you'll see a small round dimple. If you apply pressure to that spot, something helpful should happen. In this case, the spring-loaded battery tray should pop out. However, I've yet to make the tray spring out with just the pressure of a well-placed finger.

Instead, grab a paper clip, straighten out one end, and press the dimple with that end. Plink—out comes the tray. Inside, you'll find a 3-volt lithium battery (model CR2032). These batteries are common enough that you should be able to find them wherever batteries are sold, for well under a buck apiece.



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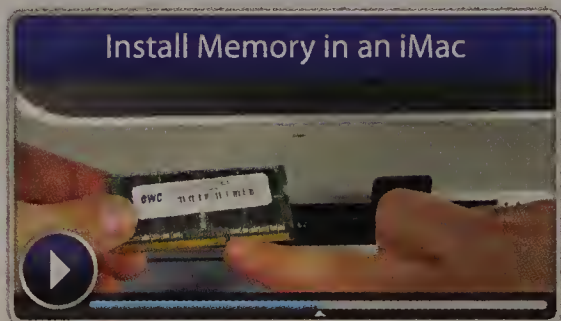
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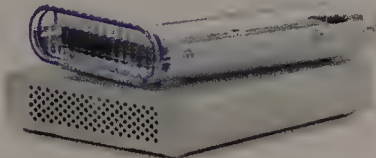
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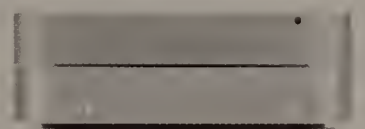
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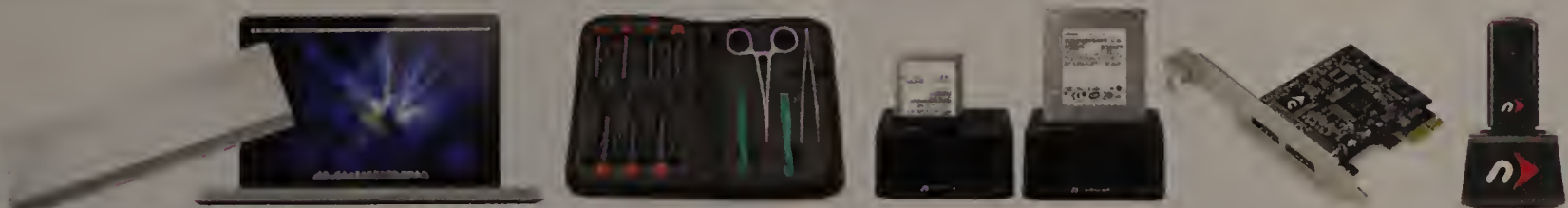
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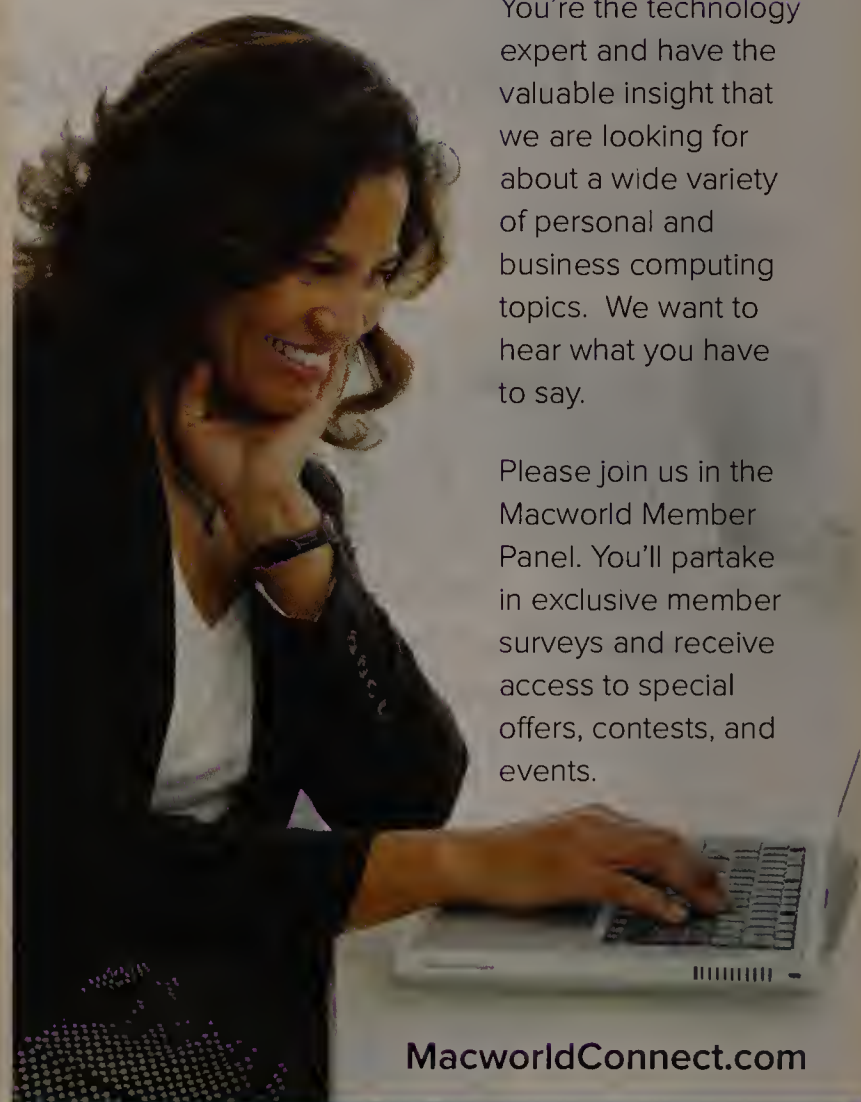
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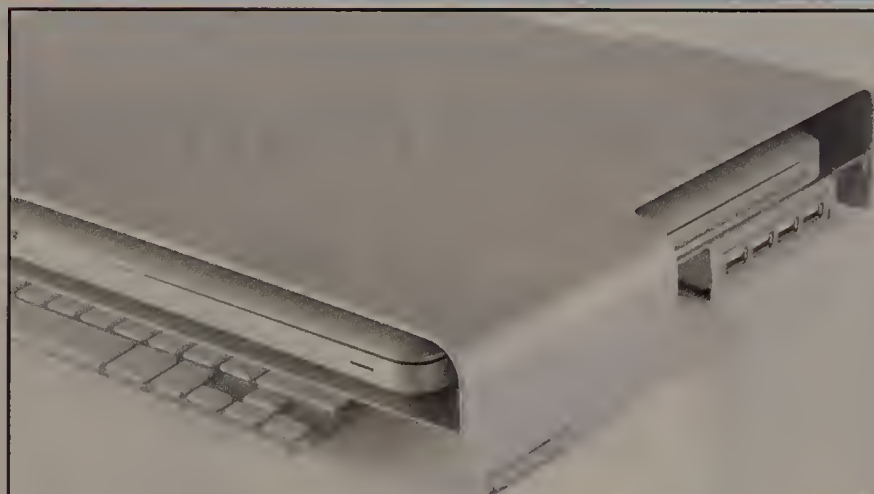
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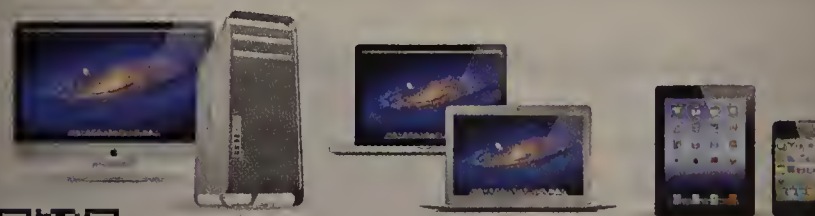
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Apple and the Future of Design

With Jony Ive taking over design across the board, what should we expect Apple's software to look like?

Blame the floppy disk. For years it served as the icon for “save,” illustrating to the user that the computer would write data to that flat square thing with the hole in it. Clicking that icon would block the UI with an hourglass cursor, and cue up the familiar grinding song of a floppy drive.

Then, in 1998, Apple introduced the iMac—with no floppy drive. Though some companies continued shipping floppy drives for more than a decade, most of the industry quickly abandoned those square disks. But the icon persisted.

The modern term for using digital graphical representations of physical items is *skeuomorphism*, and recently skeuomorphism has been taking a lot of heat. For instance, Apple's Calendar app, with the appearance of rich leather and beautiful stitching, may be heavy-handed, but it also looks a lot like an old-timey paper desk calendar. And there's the rub.

Physical Approach to Digital Design

Two ideas drive this design philosophy. The first is obvious: to make things stylish, and to let designers show off their Photoshop skills. It's this aspect of skeuomorphism that seems to rile folks up. The second, more altruistic motivation is to create something that the user is familiar with. It can help to humanize a confusing, cold piece of technology—something Apple has always been good at.

Before the iPhone, smartphones were bulky, simplistic, and overwhelmingly digital. Apple's approach was first to connect with the human holding the device, and then to show you neat things you could do with it. In the more than five years since Steve Jobs revealed the iPhone, many third-party developers have mimicked Apple's approach. Apple smartly built its developer tools to favor standard

UI elements, raising the bar for the average app's visual design. iOS's highlight lines, shadows, and gradients weren't just pretty; they also made iPhone software feel like a real thing for the user to touch—and for a device driven by touch, this was an important relationship to establish. When Apple moved toward the physical look, developers largely followed suit.

Even Apple has copied Apple: Much of the style and flair of iOS's skeuomorphism has made its way to Mac OS X. Familiarity is comfort is trust. Give the people what they're used to.

It's curious how Apple's software and hardware have taken such divergent paths—the drop shadows and textures of iOS stand in sharp contrast to the clean lines and invisible seams of the iPhone or iPad. Jony Ive's industrial-design team seems to be on the march, creating devices that feel ever more like they're

carved from a single block of magical stone. So why is Apple shipping these devices with software featuring deep shadows and visible “stitching”?

Movement Toward Minimalism

A lot of people see this reliance on physical representation as condescending, which has led to an emerging trend toward flat, minimalist design. Letterpress, the delightful Game Center-crippling word game, consists of solidly colored geometric shapes and uses sound and typography to guide the player. The to-do app Clear eschews buttons entirely, opting for pure gesture-based control.

Apple's visual design seems to stand apart from even its interaction design. Consider Apple's version of the save icon: It doesn't exist. On iOS, saving is automatic. The move away from the long-standard file system is a profoundly important move away from thinking of your content as data; instead, it's just stuff. Hardware and software alike are trending toward conceptual simplicity. Software is just taking a little longer.

Although skeuomorphic design has bridged the physical and digital worlds, everyone is comfortable with digital now. Technology is no longer witchcraft to be feared by the masses. With visual and interaction design, we're nearly past the point of real-world metaphors being useful; the simplest representation is usually best.

Jony Ive is famously minimalist. Apple's decision to put him in charge of all things design should be perceived as recognition on the company's part that the world is ready for software and hardware to work in concert, not just mimic one another.

Even Apple has copied Apple: Much of the style and flair of iOS has made its way to Mac OS X.



Dave Wiskus is a musician and designer, and cohost of the *Unprofessional* podcast (www.muleradio.net/unprofessional/).

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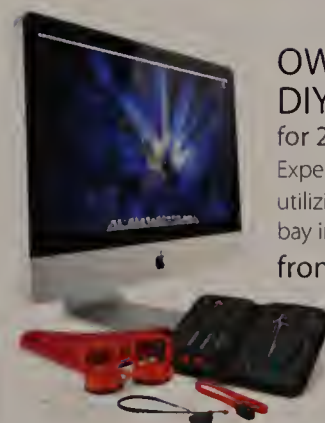
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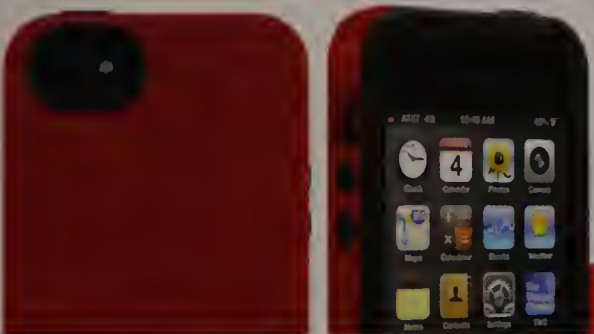
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